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Vol. 52, No. 1

The JOURNAL of the Florida Medical Association

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Questionnaire on Page 70A

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epilepsy may limit
opportunity...

Dilantin®
(diphenylhydantoin)
PARKE-DAVIS

extends horizons

This agent "...has brought new hope to an entire generation of seizure patients....With judicious use, it may be said that it alone is responsible for the prevention of more seizures than any other drug."*

DILANTIN (diphenylhydantoin) can help your epileptic patient to earn a livelihood...to prove his worth...and to share in the daily give-and-take as a full-fledged member of the workaday world.

Indications: Grand mal epilepsy and certain other convulsive states.

Precautions: Toxic effects are infrequent: allergic phenomena such as polyarthropathy, fever, skin eruptions, and acute generalized morbilliform eruptions with or without fever. Rarely, dermatitis goes on to exfoliation with hepatitis, and further dosage is contraindicated. Eruptions then usually subside. Though mild and rarely an indication for stopping dosage, gingival hypertrophy, hirsutism, and excessive motor activity are occasionally encountered, especially in children, adolescents, and young adults. During initial treatment, minor side effects may include gastric distress, nausea, weight loss, transient nervousness, sleeplessness, and a feeling of unsteadiness. All usually subside with continued use. Megaloblastic anemia, aplastic anemia, leukopenia, granulocytopenia and pancytopenia have been reported. Nystagmus may develop. Nystagmus in combination with diplopia and ataxia indicates dosage should be reduced. Periodic examination of the blood is advisable.

DILANTIN (diphenylhydantoin sodium) is supplied in several forms including Kapseals® containing 0.1 Gm. and 0.03 Gm.

*Roseman, E.: *Neurology* 11:912, 1961. 33664

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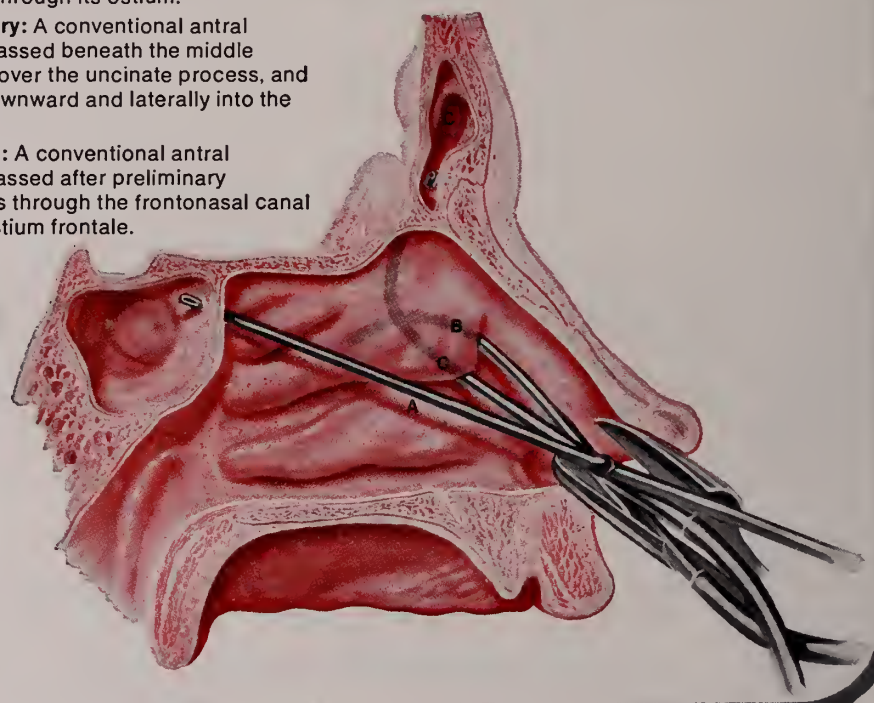
A—Sphenoid: A sphenoid cannula (under 13.5 cm.) passed around the middle and superior turbinates to the anterior wall of the sinus through its ostium.

B—Maxillary: A conventional antral cannula passed beneath the middle turbinate, over the uncinate process, and rotated downward and laterally into the ostium.

C—Frontal: A conventional antral cannula passed after preliminary maneuvers through the frontonasal canal into the ostium frontale.



In colds and sinusitis

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Before complications arise in colds and sinusitis, Neo-Synephrine solutions and sprays reduce nasal turgescence on contact — to promote essential aeration and drainage. Turbinates shrink, sinus ostia open and drainage is freed. Relief is instant and the threat of complications is lessened.

In the treatment of sinusitis, the ¼ per cent solution is a preferred vasoconstrictor, "...most closely approximating physiologic composition with the least 'rebound' tendency...."* Gentle Neo-Synephrine is well tolerated by delicate respiratory tissues. Systemic effects are practically nil, post-therapeutic turgescence is minimal and repeated applications do not lessen its effectiveness. Neo-Synephrine has been a standard among vasoconstrictors since 1935.

Available in plastic nasal sprays for adults (½%) and children (¼%), in solutions of ⅛, ¼ or 1 per cent.

*Reed, G. F.: Sinusitis, New England J. Med. 267:402, Aug. 23, 1962.

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New York, N. Y.

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The JOURNAL
of the Florida Medical Association

Volume 52, Number 1, January 1965

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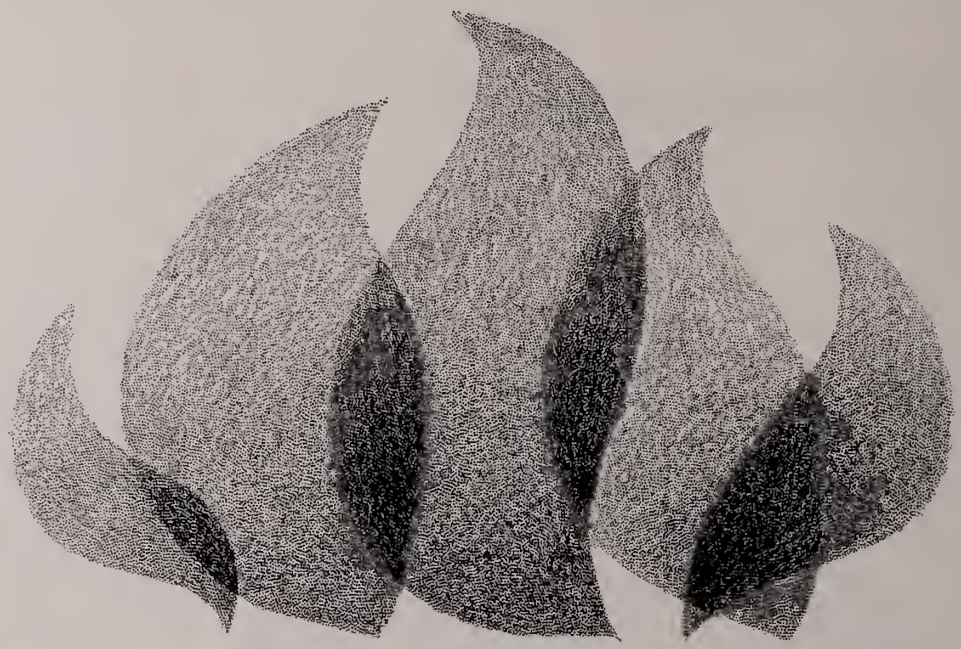
WHEN EXCESS CO_2 DAMPENS BREATHING TO THE DANGER POINT



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A SELECTIVE VENTILATING AGENT THAT DEEPENS BREATHING...IMPROVES ALVEOLAR VENTILATION...ENCOURAGES O_2 SATURATION INCREASE...HELPS LOWER CO_2 ACCUMULATION IN PATIENTS WITH RESPIRATORY DEPRESSION

in chronic pulmonary emphysema..."a potent ventilatory stimulant"[1]

in acute respiratory depression..."prompt lowering of arterial pCO_2...without the concomitant use of a respirator"[2]

in coma and severe respiratory depression..."a valuable agent not only to stimulate respiration, but as an arousal agent"[3]

in respiratory acidosis..."demonstrated effectiveness...even when oxygen was added"[4]

in barbiturate poisoning..."mainstay in...treatment"[5]

EMIVAN (ethamivan) for intravenous injection in emergency treatment of the comatose or severely respiratory-depressed patient (when caused by depressant drug overdosage or severe pulmonary involvement). Ampuls of 2 cc. (100 mg.) and 10 cc. (500 mg.) in 5% aqueous diethanolamine solution.

Also available: ORAL Tablets—60 mg., bottles of 100; and 20 mg., bottles of 100 and 1,000.

Contraindications: Known or suspected epilepsy. Parenteral use is contraindicated when side effects of coughing, sneezing, laryngospasm, or pruritus are to be avoided. Oral Emivan (ethamivan) may sometimes cause wakefulness; course of administration should not exceed eight weeks at a time. Consult product brochure for complete information.

REFERENCES: 1. Silipo, S., et al.: J.A.M.A. *177*:378 (Aug. 12) 1961. 2. Aronovitch, M., et al.: Canad. M.A.J. *85*:875 (Oct. 14) 1961. 3. Miller, W. F., et al.: J.A.M.A. *180*:905 (June 16) 1962. 4. Said, S. I., and Banerjee, C. M.: Am. J. Med. *33*:845 (Dec.) 1962. 5. Wheeldon, P. J., and Perry, A. W.: Canad. M.A.J. *89*:20 (July 6) 1963.

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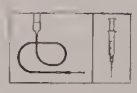

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Of 507 patients with confirmed ear, nose and throat infections... 465 or 91.7% were treated successfully with Signemycin®

Note:
Adams,* whose 50 patients included 20 with ENT infections, stated that Signemycin "was particularly valuable in infections that did not respond to other antimicrobial agents, and in patients to whom penicillin could not be given." All his cases responded within five days; in most patients, all signs of infection disappeared in three days.

*Adams, J.: J. Tenn. Med. Ass. 50:446, Nov., 1957.

Condition	No. of Patients	No. Responded to Signemycin
Otitis media	90	86
Pharyngitis and laryngitis	162	148
Sinusitis	68	55
Tonsillitis and peritonsillitis	163	153
Various	24	23
Totals	507	465 (91.7%)

consistently effective...often when others fail

Signemycin®

tetracycline HCl, 167 mg.; oleandomycin as triacetyloleandomycin, 83 mg. capsules (250 mg.)

Also available as Syrup, Pediatric Drops, and half-strength Capsules

Brief Summary and Bibliography follow.

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The answer is Orange Flavored Bayer Aspirin for Children

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Note:
Hammerl* selected his patients for treatment with Signemycin on the basis of demonstrated bacteriological resistance to other antibiotics or failure of previous therapy. Of 100 patients with various respiratory tract infections, 95 responded to Signemycin. Pathogens isolated included staphylococci and *Diplococcus pneumoniae*.

*Hammerl, H.: Wien. Med. Wschr. 108:629, July 26, 1958.

Condition	No. of Patients	No. Responded to Signemycin
Abscess, pulmonary	17	16
Bronchiectasis	19	13
Bronchitis	286	267
Bronchopneumonia	192	179
Empyema	12	11
Pneumonia, lobar	150	146
Pneumonia, other febrile	160	150
Various infected pneumopathies	192	172
Totals	1,028	954 (92.8%)

consistently effective...often when others fail

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tetracycline HCl, 167 mg.; oleandomycin as triacetyloleandomycin, 83 mg. capsules (250 mg.)

Also available as Syrup, Pediatric Drops, and half-strength Capsules

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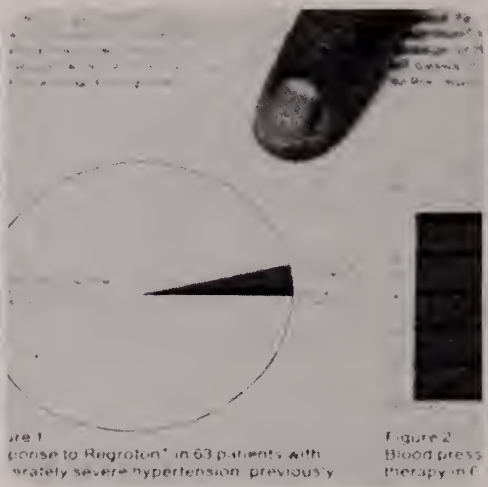
Not *another* reserpine-diuretic combination!

Certainly. Regroton has outperform other combinations.

Says who?

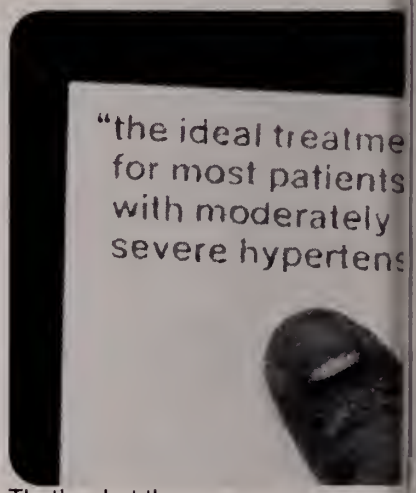


Says this 2-year study by Finnerty.

What's the dosage?

Just one tablet with breakfast.

Sounds ideal!



That's what they say.

Composition: Each tablet contains chlorthalidone, 50 mg., and reserpine, 0.25 mg.
Contraindications: History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases.
Warning: Discontinue 2 weeks before general anesthesia, 1 week before electroshock therapy, and if depression or peptic ulcer occurs.
Precautions: Reduce dosage of concomitant antihypertensive agents by one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take particular care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended. Use with caution in patients with ulcerative colitis, gallstones, or bronchial asthma.
Side Effects: Nausea, vomiting, diarrhea, muscle cramps, headaches and dizziness. Potential side effects include angina pectoris, anxiety, depression, drowsiness, hyperglycemia, hyperuricemia, lassitude, leukopenia, nasal stuffiness, nightmare, purpura, urticaria, and weakness.
For full details, see the complete prescribing information.

Availability: Bottles of 100 and 1000 tablets.
Average Dosage: One tablet daily with brea

*Chupkovich, V.; Finnerty, F. A., Jr., and Kakaviatos, N.: The value of chlorthalidone reserpine in moderately severe and severe tension: A two year study. Presented at the Inter-American Congress of Cardiology, Mc June 14–19, 1964.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
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Regroton®

"the ideal treatment for most patients with moderately severe hypertension"*

Geigy

Of 1,021 children with various confirmed infections... 950 or 93.0% were treated successfully with Signemycin®

Note:
The effectiveness of Signemycin was demonstrated by Chattas and his co-workers* who administered Signemycin to 30 children with serious staphylococcal infections resistant to commonly used antibiotics. Only one failed to respond. In each case the use of this drug was indicated by antibiogram. Those children treated with a nonselected antibiotic—for comparative purposes—took three times longer to recover.

Chattas, A. et al.: Antibiot. Med. 7:300, May, 1960.

Condition	No. of Patients	No. Responded to Signemycin
Eye, ear, nose, throat infections	368	343
Respiratory infections	369	346
Gastrointestinal infections	42	30
Skin and soft-tissue infections	38	37
Deep-seated or generalized infections	47	44
Various conditions	157	150
Totals	1,021	950 (93.0%)

consistently effective...often when others fail

Signemycin®

tetracycline HCl, 167 mg.; oleandomycin as triacetyloleandomycin, 83 mg. capsules (250 mg.)

Signemycin is also available as half-strength Capsules, preconstituted raspberry-flavored Syrup and Pediatric Drops

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Signemycin® Bibliography
1. Adams, J.: J. Tenn. Med. Ass. 50:446, Nov., 1957. 2. Arachi, N. and Gheradi, F.: Quad. Urol. 9:156, Apr.-June, 1959. 3. Arneil, G. C.: Antibiot. Ann. 1958-1959:327. 4. Arrigoni, G. et al.: Minerva Med. 48:2701, Aug. 25, 1957. 5. Baur, A.: Aerztl. Prax. 11:1845, Dec. 5, 1959. 6. Bellomio, S. et al.: Riv. Ital. Tracoma, vol. 10, Nos. 1-2, Jan.-June, 1958. 7. Bellomio, S. et al.: Riv. Ital. Tracoma, vol. 11, No. 1, Jan.-Mar., 1959. 8. Belonoschkin, B. and Lindgren, M.: Svensk. Lakartidn. 56:2134, July 31, 1959. 9. Bergdahl, U.: Svensk. Lakartidn. 55:1715, June 6, 1958. 10. Bhattacharyya, M. N. and Bhuyan, J. N.: Antiseptic 56:611, Aug., 1959. 11. Blass, R.: Schweiz. Med. Wschr. 89:158, Feb. 7, 1959. 12. Bolognesi, C.: Minerva Med. 48:2695, Aug. 25, 1957. 13. Candela, R. B.: Med. Esp. 46:273, Oct., 1961. 14. Cappelli, E.: Minerva Med. 48:2690, Aug. 25, 1957. 15. Carter, C. H. and Maley, M. C.: Antibiot. Ann. 1956-1957:51. 16. Caruselli, M. and Musca, A.: Minerva Med. 51:3516, Oct. 17, 1960. 17. Ceitlin, J.: Med. Panamer. 15:72, Aug. 1, 1960. 18. Chattas, A. et al.: Antibiot. Med. 7:300, May, 1960. 19. Chiarenza, A.: Minerva Med. 48:2692, Aug. 25, 1957. 20. Cooper, J. et al.: Antibiot. Med. 5:302, May, 1958. 21. Cupples, J. F. B. and Perry, A. W.: Canad. Med. Ass. J. 77:699, Oct. 1, 1957. 22. David, N. A. and Carter, P. B.: Rocky Mountain Med. J. 58:27, Mar., 1961. 23. Davis, W. G.: Clin. Rev. 1:21, Apr., 1958. 24. de Lellis, J.: Dia Med., Apr. 24, 1958, p. 824. 25. Dienz, H.: Aerztl. Prax. 13:1797, 1961. 26. Dietel, V. and Meissner, F.: Deutsch. Gesundh. 16:2470, Dec. 28, 1961. 27. Dryjski, J.: Pol. Tyg. Lek. 24:1113, June 24, 1959. 28. Durrieu, C. A. et al.: Antibiot. Ann. 1958-1959:297. 29. Faz Tabio, H.: Rev. Cuba. Pediat. 30:219, Apr., 1958. 30. Febles Alonzo, D. and Batthyany, C.: Actas Ginecotocol. (Uruguay) 13:4, Aug., 1959. 31. Febles Alonzo, D. and Biderman, I.: Antibiot. Ann. 1958-1959:270. 32. Fiora, F. and Compa, F.: Dia Med., Apr 3, 1958, p. 570. 33. Garre, E.: Antibiot. Med. 7:285, May, 1960. 34. Geiger, K.: Praxis 15:365, Apr. 9, 1959. 35. Gemma, G. B. et al.: Minerva Med. 48:2643, Aug. 25, 1957. 36. Gerner, G.: Arzneimittelforschung 9.484, Aug., 1959. 37. Grazia, G.: Clin. Pediat. (Bologna) 41:1005, Nov., 1959. 38. Greco, O.: Med. Condotto-Med. Prat. 9:497, 1958. 39. Hammerl, H.: Wien. Med. Wschr. 108:629, July 26, 1958. 40. Henne, H. F.: Med. Klin., No. 29, July 18, 1958, p. 1267. 41. Heredia Diaz, J. et al.: Medicina (Mex.) 38:308, July 10, 1958. 42. Herrera, W. A.: Dia Med. 30:3116, Dec. 8, 1958. 43. Hoffmann, H.: Medizinische (Stuttgart) 45:1830, Nov. 8, 1958. 44. Kelleher, D.: Practitioner 182:227, Feb., 1959. 45. Kleine, W. and Hagen, H.: Ther. Gegenw. 98:171, Apr., 1959. 46. Klovstad, O.: T. Norsk. Laegeforen. 77:681, Aug. 15, 1957. 47. Kobari, K. and Tajiri, I.: Naika No Ryoiki (Field of Internal Medicine) 7:245, May, 1959. 48. Kohler, H. F.: Clin. Rev. 1:16, Apr., 1958. 49. Kraljevic, R. et al.: Antibiot. Med. 5:364, June, 1958. 50. La Caille, R. A. and Prigot, A.: Antibiot. Ann. 1956-1957:67. 51. Lapeyre, L. et al.: Marseille Med. 99:953, 1962. 52. Levi, W. M., Jr. and Kredel, F. E.: J. S. Carolina Med. Ass. 53:178, May, 1957. 53. Loughlin, E. H. et al.: Antibiot. Ann. 1958-1959:293. 54. Loughlin, E. H. et al.: Antibiot. Med. 7:739, Dec., 1960. 55. Mathur, S. N. and Joshi, V. S.: J. Indian Med. Ass. 34:437, June 1, 1960. 56. Moggian, G.: Minerva Med. 48:2648, Aug. 25, 1957. 57. Molinelli, E. A. et al.: Antibiot. Ann. 1957-1958:692. 58. Montilli, G. and Avellino, M.: Dermatologica (Basel) 9:2, 1958. 59. Morador, J. L. et al.: Antibiot. Ann. 1959-1960:716. 60. Morador, J. L. and Saldana Tate, L.: An. Ateneo, Clin. Quirur. 1:52, Jan., 1958. 61. Morel, A. S.: Clin. Rev. 1:18, July, 1958. 62. Morey, G. S. et al.: Rev. Hosp. Nino (Lima) 18:293, 1957. 63. Ottolenghi, C. E. et al.: Bol. Soc. Cir. B. Air. 41:739, Nov. 6, 1957. 64. Pagola, J. G. et al.: Antibiot. Ann. 1958-1959:287. 65. Pavone, M. et al.: Minerva Urol. 70:121, Sept.-Oct., 1958. 66. Porrazzo, F.: Gazz. Med. Ital. 118:550, Dec., 1959. 67. Prats, F. and de la Parra, M. A.: Antibiot. Ann. 1959-1960:484. 68. Prokop, O.: Prakt. Arzt. 12:145, Feb. 15, 1958. 69. Ramirez Boettner, C. M. et al.: Rev. Med. Paraguay 5:269, July-Sept., 1960. 70. Randig, K.: Deutsch. Med. J. 8:447, Aug. 15, 1957. 71. Saavedra Amaro, S. and Lopez Zepeda, L.: Medicina (Mex.) 38:396, Aug. 25, 1958. 72. Saldana Sotomayor, F.: Medicina (Mex.) 39:191, May 10, 1959. 73. Santos, A.: Rev. Brasil. Med. 16:463, July, 1959. 74. Schenone, H.: Antibiot. Ann. 1958-1959:316. 75. Schunk, A.: Int. Rec. Med. 173:143, Mar., 1960. 76. Sgarzini, L. and Amato, R.: Ann. Stomat. 7:499, July, 1958. 77. Shubin, H.: Antibiot. Med. 4:174, Mar., 1957. 78. Sundberg, R. H.: Antibiot. Med. 7:115, Feb., 1960. 79. Talbot, J. R.: Wisconsin Med. J. 57:237, June, 1958. 80. Tato, J. M. et al.: Antibiot. Ann. 1957-1958:675. 81. Weithofer, W.: Medizinische (Stuttgart) No. 33-34:1490, Aug. 22, 1959. 82. Willcox, R. R. and Rosedale, N.: Brit. J. Vener. Dis. 38:19, Mar., 1962. 83. Willemot, J. P. et al.: Bruxelles Med. 38:1026, June 22, 1958. 84. Winton, S. S. and Chesrow, E. J.: Antibiot. Ann. 1956-1957:55. 85. Wolman, B.: Practitioner 185:199, Aug., 1960. 86. Yodh, B. B.: J. J. J. Group Hosp. 5:183, July, 1960. 87. Zaldivar, C. G. and Falcone, F. L.: Rev. Hosp. Nino (Lima) 20:141, June, 1958.

SIGNEMYCIN®

Side Effects: Glossitis and allergic reactions, as well as severe anaphylactoid reactions, have been reported as rare side effects. Should significant reaction or idiosyncrasy occur, discontinue medication and institute countermeasures. Use of tetracycline during the last trimester of pregnancy, neonatal period and early childhood may cause discoloration of developing teeth. Reduce usual oral dosage and consider serum level determinations in patients with impaired renal function to prevent possible liver toxicity due to excessive accumulation of antibiotic in the serum.

Precautions: Overgrowth of nonsusceptible organisms may occur. In such cases, discontinue medication and institute appropriate specific therapy as indicated by susceptibility testing. Aluminum hydroxide gel given with antibiotics has been shown to decrease their absorption and is contraindicated. The coloring agents used in Signemycin Syrup and Pediatric Drops may produce red discoloration of stools.

Triacetyloleandomycin, a constituent of Signemycin, administered to adults in daily oral doses of 1.0 Gm. (3 Gm. Signemycin) for periods of more than ten days may produce hepatic dysfunction and jaundice. In the rare patient who requires this high dosage level of Signemycin initially, liver function should be carefully followed and dosage should be reduced, as promptly as possible, to the usual recommended range of 1.0 to 2.0 Gm. per day. Therefore, Signemycin is recommended primarily for the treatment of acute or severe infections, with treatment restricted to a ten-day period. If clinical judgment dictates continuation of therapy beyond ten days, serial monitoring of the liver profile should be carried out, including BSP, transaminase, and cephalin flocculation tests. Changes observed in liver function were reversible following discontinuation of the drug.

Formulas: Capsules: 250 mg. Signemycin (167 mg. tetracycline HCl and 83 mg. oleandomycin as triacetyloleandomycin).

Capsules: 125 mg. Signemycin (83 mg. tetracycline HCl and 42 mg. oleandomycin as triacetyloleandomycin).

Syrup: 125 mg. Signemycin (tetracycline equivalent to 83 mg. tetracycline HCl and 42 mg. oleandomycin as triacetyloleandomycin) per 5 cc.

Pediatric Drops: 100 mg. Signemycin (tetracycline equivalent to 67 mg. tetracycline HCl and 33 mg. oleandomycin as triacetyloleandomycin) per cc.

More detailed professional information available on request.

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PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc. New York, New York 10017

Of 5,057 patients with confirmed infections of all body systems... 4,731 or 93.5% were treated successfully with Signemycin®

Note:

The high rate of response to Signemycin in these cases is noteworthy because the totals include many patients with difficult-to-treat infections, many whose infections had proved resistant to other agents, and many who had been treatment failures on other therapy.[1-87] In addition the following criteria were used for the cases cited: (1) only published results were used (2) results were confirmed by clinical and/or laboratory findings (3) patients were cured, not "improved" (4) dosage conformed with current recommendations in the United States (5) no other anti-infective agents were used concomitantly (6) no instance of prophylactic use was included in these tabulations.

Condition	No. of Patients	No. Responded to Signemycin
Ear, nose and throat infections	507	465
Respiratory infections	1,028	954
Gastrointestinal infections	425	387
Genitourinary infections	748	684
Skin and soft-tissue infections	1,088	1,036
Bone and joint infections	71	64
Deep-seated or generalized infections	257	251
Obstetrical & gynecological infections	341	320
Miscellaneous conditions	592	570
Totals	5,057	4,731 (93.5%)

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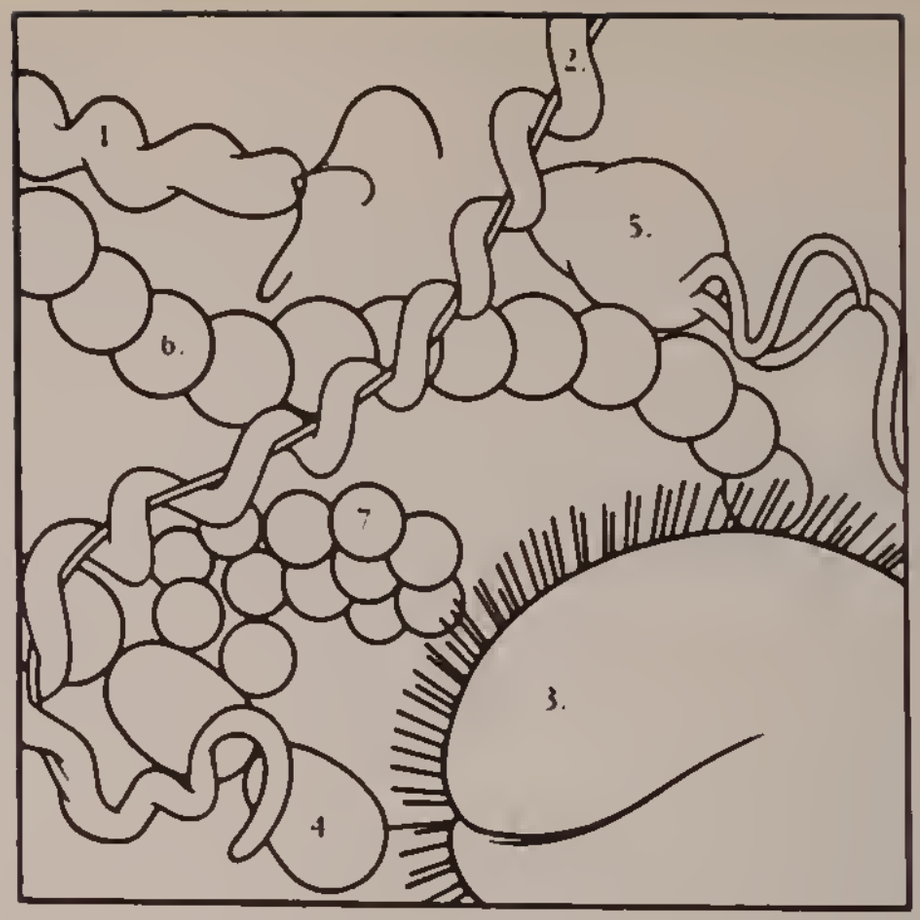
1. Kunin, C. M. et al.: J. Clin. Invest. 38:1950, Nov., 1959.

The microorganisms shown here—ranging from common to rare and refractory—demonstrate the wide spectrum of Terramycin (oxytetracycline) effectiveness.

This three-dimensional sculptural rendition of microorganisms was based on photo micrographs.



Diagrammatic key to microorganisms

1. *Spirillum minus*
2. *Leptospira icterohaemorrhagiae*
3. *Balantidium coli*
4. *Brucella melitensis*
5. *Pseudomonas aeruginosa*
6. Streptococci
7. Staphylococci

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ll precautions applicable to intramuscular injection should e carefully observed. Intramuscular solutions should be in- cted well within the body of a relatively large muscle, such the upper outer quadrant of the buttock or the lateral thigh; o not inject into the lower or middle thirds of the upper arm. are should always be taken to avoid injecting into a blood vessel or major nerve. Subcutaneous or fat-layer injection should be avoided.
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1. Griffith, R. S., and Black, H. R.: Current Ther. Res., *6*:253, 1964.

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The JOURNAL
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Cardioversion

A Study of 203 Episodes

LOUIS LEMBERG, M.D.
AND AGUSTIN CASTELLANOS JR., M.D.
MIAMI

The use of external direct current electric countershock has recently been introduced as effective therapy in the cardioversion of rapid ectopic rhythms of the heart. This procedure, known as cardioversion and introduced by Lown and his co-workers[1-3] two years ago, has since been used in a growing number of centers both nationally and internationally. Cardioversion is now well established as a new therapeutic tool in cardiac management.

The use of electricity in cardiac resuscitation is not new. The first report in The Register of the Royal Human Society for the year 1774 records the successful resuscitation of a three year old child by applying an electric shock to the chest following death. Abildgaard[4] in 1760 first showed that direct application of electric current to the exposed heart of an experimental animal could abolish ventricular fibrillation. Prevost and Battelli[5] in 1899 reported that a weak electric current, passed directly through the exposed heart of an experimental animal, provoked ventricular fibrillation and a stronger current abolished ventricular fibrillation. These early experimental studies employed both direct and alternating current. This work went unnoticed for 30 years. In 1932 Kouwenhoven and his co-workers[6,7] after extensive experiments established the fundamentals for the present day use of electric countershock. Wiggers[8,9] in 1940 conducted detailed investigations establishing the consistent effectiveness of alternating current in converting ventricular fibrillation in the exposed heart. Finally, Beck,[10] making use of knowledge gained from all of the previous experimental work, successfully defibrillated an exposed human heart during surgery using AC countershock. Although electric current had not been used for closed chest defibrillation prior to the extensive studies of Zoll and his co-workers, there is a report by Ferris and his co-workers[11] of defibrillation in a sheep with AC countershock through the intact chest wall. Zoll[12] in his reports on the use of AC countershock for external defibrillation predicted the future use of electric countershock in the treatment of arrhythmias. In 1961 Alexander, Kleiger and Lown[4] reported the first case of ventricular tachycardia successfully converted with external countershock using alternating current.

Extensive experiments on dogs by Lown and his co-workers,[3] using DC and AC countershock, with and without synchronization to electrical events in the cardiac cycle, confirmed the safety of DC synchronized countershock. Vulnerable periods for the atrium and ventricle were mapped out in the cardiac cycle. These zones appeared at the termination of the R wave for the atria and before the peak of the T wave for the ventricle. When the impulse was delivered in these critical zones, ventricular or atrial fibrillation was induced consistently. Electrical impulses inserted outside the vulnerable zones did not initiate fibrillation at any time. Confirmation of these results was made in the experimental animal in our laboratories prior to the clinical use of the Cardioverter (figs. 1-3).

Experience in cardioversion gained at the Jackson Memorial Hospital in the past year is based on analysis of 203 episodes of countershock.[13-15] The indications for attempting cardioversion were the following:

1. Ventricular fibrillation
2. Ventricular tachycardia
3. Supraventricular tachycardia

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From the Department of Medicine, Section of Cardiology, University of Miami School of Medicine, and the Department of Electrophysiology, Jackson Memorial Hospital, Miami.

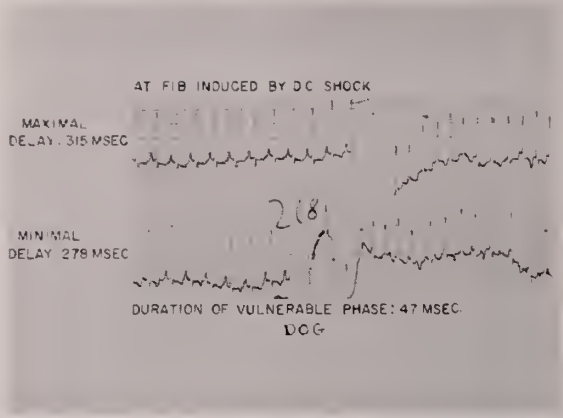

Fig. 1. — Atrial fibrillation induced in the dog during the vulnerable period between 278 and 315 msec. following the preceding R wave. Note that it occurs in and around the descending limb of the R wave.

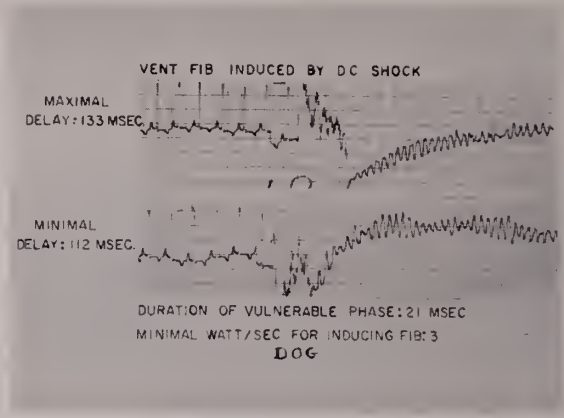

Fig. 2. — Ventricular fibrillation induced in the dog during the vulnerable period between 112 and 133 msec. following the R wave. Note that it occurs immediately before the peak of the T wave.

4. Atrial flutter
5. Atrial fibrillation
   a. Atrial fibrillation persisting after successful cardiac surgery
   b. Atrial fibrillation persisting after successful therapy of thyrotoxicosis
   c. Atrial fibrillation of recent onset (less than one year)
   d. Chronic atrial fibrillation with congestive failure.
   e. Chronic atrial fibrillation, asymptomatic

The criteria contraindicating cardioversion were the following:

1. Atrial fibrillation in the presence of frequent multifocal or multiform ventricular contractions due to digitalis overdosage.
2. Atrial fibrillation in the presence of complete AV block and slow ventricular rate.
3. Atrial flutter in the presence of complete AV block and slow ventricular rate.
4. Atrial fibrillation in the presence of hypokalemia.
5. When marked effects on repolarization (prolonged QT and TU fusion) are seen following quinidine premedication, cardioversion is delayed for 24 hours and quinidine is either discontinued or the dosage reduced.

Premedication

When atrial fibrillation has existed longer than three months anticoagulants are given for three weeks prior to cardioversion and discontinued within a week following the procedure. On the day of cardioversion, 0.2 Gm. of quinidine sulfate is given every two hours for a total of 0.6 to 1.0 Gm.

Procedure

Sodium methohexital (Brevital), a short-acting barbiturate, is given intravenously at a rate of 10 mg. per second for a total of 30 to 50 mg. The usual precautions for general anesthesia are observed. Electric countershock can be used without anesthesia if energy outputs of less than 100 watt/seconds are used. Since the duration of countershock is 2.5 milliseconds, pain is not perceived. The sensation in the unanesthesized patient is usually described as a feeling similar to that of touching an exposed live wall socket. The two electrode paddles covered with conduction paste are applied firmly to the chest, one at the second right intercostal space and the other lateral to the apex in the anterior axillary area. If firm pressure over a posterior electrode paddle can be maintained, an AP electrode position with the heart subtended between the two electrodes is preferable since lower energy outputs are required.

Countershock is delivered at a preset time in the cardiac cycle, usually at the R wave. The accuracy of the discharge timing is checked prior to each procedure. An electrocardiogram is recorded continuously before, during and for 15 minutes following cardioversion. The initial setting for energy output with the AP electrode position is 50 watt/seconds, and with the anterior chest electrode position, 75 watt/seconds. If conversion fails with the first countershock, the procedure is repeated at 150, 250 and up to 400 watt/seconds. The patient is usually fully awake within three to five minutes following the procedure. Subsequent to successful cardioversion, quinidine sulfate, 0.8 to 1.6 Gm., is given daily in divided doses. There were no serious or life-threatening

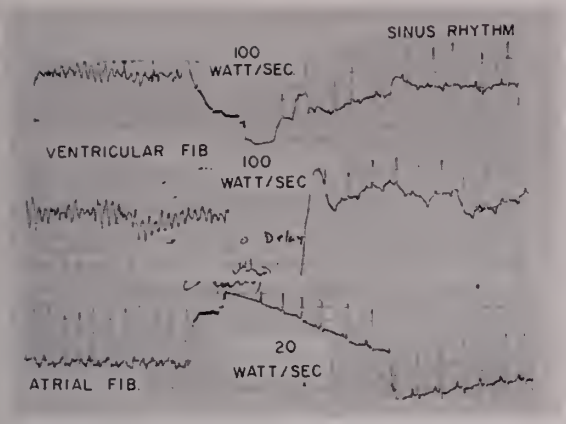

Fig. 3. — Ventricular and atrial fibrillation in the dog abolished with energy outputs of 20 and 100 watt/sec. synchronized to the R wave.

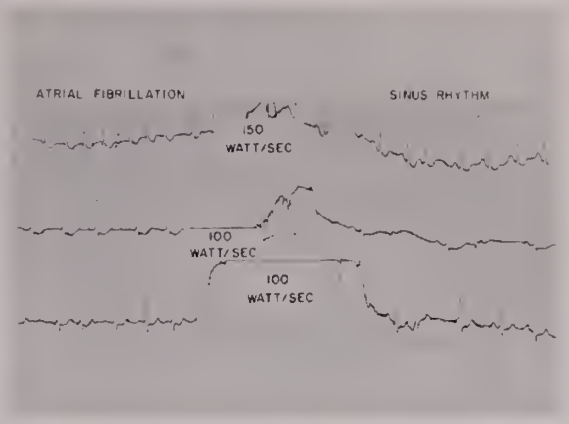

Fig. 4. — Conversion of atrial fibrillation to sinus rhythm in three patients. Rare, transient, premature atrial and ventricular beats can be seen following conversion.

complications directly or indirectly related to cardioversion in this series. Transient innocuous supraventricular arrhythmias related to the procedure of cardioversion were observed and are reported in another communication.[13,14]

The technical reasons for failure of conversion are the following:

1. High resistance due to an oxide film forming on the surface of the electrode paddles can be readily seen as a grey surface and is due to improper cleaning following its use. The presence of this oxide film impedes the delivery of adequate energies.
2. Excessive low resistance due to profuse sweating, moisture on the chest, or excessive electrode jelly bridging the electrodes allows significant shunting of current across the chest with resultant decrease in electrical energy delivered to the heart.
3. Inadequate contact of the electrode with the skin through either loose application or little or no electrode jelly will significantly reduce the energy delivered.

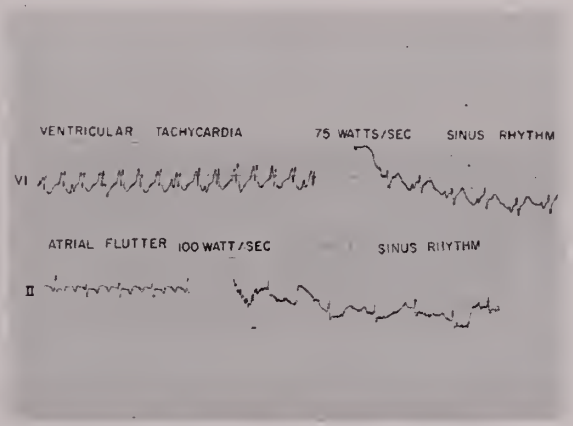

Fig. 5. — Prompt conversion without postconversion arrhythmias in ventricular tachycardia and atrial flutter.

Results

The results in 167 patients in whom DC electric countershock has been used are shown in table 1. The figures for successful termination of arrhythmias are similar to those reported by Lown and his co-workers[16] and Killip.[17]

Cardioversion in patients with atrial fibrillation, and the etiology and the duration of atrial fibrillation are shown in tables 2 and 3.

Examples of cardioversion of atrial fibrillation, ventricular tachycardia, and atrial flutter are shown in figures 4 and 5.

The maintenance of a normal sinus rhythm following cardioversion depends on a variety of factors and is a problem separate from the procedure itself. In fact the problems do not differ with those encountered in maintaining sinus rhythm following conversion with the usual antiarrhythmic drugs. The majority of patients require long term suppressive doses of quinidine sulfate. Since adjustment of drug therapy may require a period of trial and error, with occasional relapse and repeat cardioversion, the rapport between patient and physician is essential.

Summary

The need for determining the precise diagnosis of an ectopic tachycardia in order to initiate the most effective antiarrhythmic drug therapy may well be obsolete in the near future. This observa-

Table 1. — Results of Cardioversion
203 Episodes

	Patients	Episodes	Conversions
Atrial fibrillation	100	115	90%
Atrial flutter	33	42	100%
Ventricular tachycardia	30	42	100%
Nodal tachycardia	4	4	0%
Total	167	203	

Table 2. — Etiology of Atrial Fibrillation

	Patients
Arteriosclerotic heart disease	46
Rheumatic heart disease	54
Total	100
Rheumatic Heart Disease	
Mitral stenosis, predominant	35
Mitral insufficiency, predominant	8
Multivalvular	11
Total	54

Table 3. — Duration of Fibrillation

Less than 6 months	38
6 months — 1 year	25
1 - 2 years	13
2 - 5 years	13
5 - 10 years	10
More than 10 years	7
Total	106 Episodes*

*In 9 cases the exact duration of the arrhythmia could not be determined.

tion is made in the light of recent experience gained in the use of a new method of therapy for cardiac arrhythmias. DC electric countershock or cardioversion is a relatively simple effective and safe procedure for conversion of arrhythmias. It is especially useful for ectopic tachycardias during acute myocardial infarctions. Simple bedside procedures of vagal stimulation for terminating paroxysmal tachycardias should always be attempted prior to countershock.

References are available upon request from the authors.

University of Miami.

Labor by Induction

Samuel L. Vinci, M.D.
LEESBURG

New problems are challenging modern obstetrics. Often the solution lies within easy grasp, if we will but abandon outmoded ideas and move forward. One of these forward steps is the elective termination of pregnancy. More specifically, this report is concerned with one of the methods for accomplishing this, the induction of labor.

Recently, there has been a trend for families to move from the big cities to outlying smaller communities. Travel time of an hour or two is often needed to reach the city from the suburbs. The majority of these suburban areas do not have adequate hospital facilities. Most of the patients wish to be taken care of by their former physician in the city, and in the hospital of his choice. Needless to say, this situation presents many problems, especially for emergency hospital care. The greatest of these problems arises with pregnant multiparas.

With any of these patients labor might begin at any given time. This might be a time when the husband is not at home, and consequently transportation to the hospital is not easily available. Also, if labor should start during the so-called busy business hours, it may be impossible to get through the heavy traffic in time for delivery in the hospital. This problem is accentuated in the many multiparas who may deliver rapidly. Frequently these families have several small children for whom some provision must be made when the mother is to go to the hospital for delivery. Another serious problem arises if active labor begins after the patient has recently eaten a large meal; now the provision for anesthesia becomes more complex.

Modern obstetrics can respond to this challenge by the judicious use of labor by induction. This procedure is by no means a new one to obstetrics. Through the years, induction of labor has been used in the management of many complications of labor. It is common practice to induce labor in many diabetic mothers during the eighth month of pregnancy, in an attempt to deliver the baby before it becomes too large. In many cases of preeclampsia and eclampsia not responding to conservative therapy labor is induced. In some clinics, in proved cases of Rh-negative blood with a previous history of erythro-

blastosis early labor is often induced in the presence of increasing antibody titers. In pregnant cardiac patients labor may be induced in the seventh month when serious cardiac decompensation seems inevitable if the pregnancy progresses further. Also, cases of premature rupture of the membranes are included in this category.

These are just a few examples of the many cases treated by induction of labor. It seems only logical that if this procedure is used as a life-saving measure in such complicated cases, then it should be used in selected normal ones.

Patient Selection

It has been our practice for the past several years to deliver most of our multiparas by induction of labor; however, the requirements that our cases must fulfill are rigid and exacting.

1. The patient should be a multipara.
2. She must be a patient of at least average intelligence and willing to cooperate in this procedure.
3. There must be no history of previous severe dystocia.
4. There must be no cephalopelvic disproportion.
5. There must be no noticeable uterine fibroids or adverse cervical or vaginal disease.
6. The patient must be in good physical condition.
7. She must be near or at term.
8. The presentation must be cephalic.
9. The fetal head must be engaged.
10. The cervix must be 80 per cent or more effaced.
11. There must be 2 cm. or more of cervical dilation.

Grand multiparas and very nervous, high-strung patients should not be considered for this induction procedure.

Technique

Our method is as follows: After it has been determined that the candidate for induction meets these criteria, she is instructed to report to our office once weekly during the last month of her pregnancy. She takes a cleansing enema and empties her bladder before reporting to the office.

The patient is draped and placed in the lithotomy position. A sterile glove is used with 'Neosporin' Ointment, an antibiotic preparation, applied to the examining fingers both to act as a lubricant and to prevent infection. Recently we have been using 'Lubasporin,' a sterile urethral antibacterial lubricant, which is proving to be even more satisfactory. A careful vaginal examination is made and the fetal presentation and condition of the cervix are determined. This examination is performed once weekly until the cervix is found to be "ripe" and the patient ready for induction.

The patient is then admitted to the hospital where she is carefully examined by the house staff. The perineum is shaved and prepared as for routine delivery. She is given a light supper and then medicated with 10 grains of quinine orally, and amobarital sodium and secobarbital sodium (Tuinal) 1½ grains, for sedation. Before bedtime the patient is also given a Fleet enema.

At 8 o'clock the next morning, having had no breakfast, she is taken to the delivery room where she is given a sterile vaginal preparation, using pHisoHex solution. Under strict aseptic precaution and with 'Lubasporin' used as a lubricant on the examining fingers, the cervix is gently dilated, the membranes are stripped free from the cervix and ruptured with a long Allis clamp. The fetal head is gently pushed up to allow a large quantity of amniotic fluid to escape. Care is taken at all times to make sure that the cord does not prolapse.

The patient is then transferred to the labor room, where the fetal heart tones are monitored periodically. She is given 20 cc. of calcium gluconate (Glucoheptonate), intravenously. This appears to enhance uterine contractions. At one time we used oxytocin (Pitocin) by intravenous drip to initiate labor. More recently, we have given up the use of oxytocin completely and replaced it by giving 1 cc. of sparteine sulfate (Tocosamine) intramuscularly. This latter drug has been much safer and much more satisfactory.

It is mandatory that a physician be present with the patient throughout her entire labor. When labor is well established, the patient receives meperidine (Demerol) 100 mg. and atropine grains 1/150 intramuscularly. If more analgesia is required, meperidine 50 mg. and secobarbital sodium (Seconal Sodium) 50 mg. are given intravenously and separately as necessary. Again more recently, we have been using propiomazine hydrochloride (Largon) 1 cc. intravenously in place of meperidine. Rarely have we supplemented propiomazine hydrochloride with 25 mg. of meperidine intravenously. In well established labor we give 20 to 30 mg. of propiomazine

hydrochloride intravenously with 25 to 75 mg. of meperidine. The desired amount of belladonna alkaloids may be added as required.

For delivery, 95 per cent of the patients received inhalation anesthesia with nitrous oxide and oxygen, cyclopropane and oxygen, or open drop ether. The other 5 per cent of patients were delivered following pudental block.

Results

During the 10 year period, we have used this method of delivery in 600 cases. Measuring time from the beginning of the procedures for the induction of labor, in 90 per cent of the cases delivery took place within six hours, in 5 per cent within eight hours, and in the remaining 5 per cent within 12 hours.

Eighty-five per cent of the patients reported that they would request induction of labor for future deliveries. Fifteen per cent of the patients were not pleased. Most of these thought that the labor, while short, was very strong and painful.

There were no serious complications in the entire series, no maternal morbidity, and no fetal or maternal deaths. Especially noteworthy was the absence of infection, regardless of the frequent intravaginal manipulations during the last month of pregnancy, during the induction procedure, and during labor.

Discussion

To estimate as accurately as possible just when the patient is ready for induction, sterile vaginal examination in the office is indispensable. This may be made safely through the use of 'Neosporin' Ointment or 'Lubasporin' Lubricant. Also, in the hospital the progress of labor can be followed more accurately by sterile vaginal examinations rather than by rectal examinations. The use of 'Neosporin' or 'Lubasporin' as a lubricant and antiseptic in this procedure has been very efficacious.

Infrequently, in those cases in which labor does not occur after the use of the oxytocics, the patient is returned to her bed for a night's sleep. Sometimes labor begins spontaneously during the night. If not, the next morning the oxytocic may be repeated. We have found sparteine sulfate very efficacious and most satisfactory as an oxytocic in place of oxytocin.

This procedure may be used for primiparas if circumstances dictate. In this case, the patient must meet all of the other criteria; and in addition, the physician should be experienced in this technique of induction and should exercise the greatest degree of care in all details to ensure safety for mother and child. Even with multiparas, the entire success of this procudure depends upon strict adherence to the provisions set forth.

A recent article entitled "Standard Practices at Sloane Hospital" stated that the rationale for elective induction of labor is mainly concern for convenience of the patient. Induction permits the patient to make more orderly last minute arrangements, and to arrive at the hospital calm and with a relaxed attitude. Elective induction also means better supervised labors, more alert hospital staffs, emptier stomachs and rectums, faster labors, and considerable convenience to the doctor.

Summary and Conclusions

Elective induction of labor was performed in 600 normal multiparas. With use of the technique described, no maternal morbidity and no fetal or maternal deaths occurred. For most of the patients delivery was prompt, and they desired induction for future deliveries.

Bactericidal lubricants were employed to make sterile vaginal examinations feasible in the office, and to facilitate the use of vaginal examination in the hospital to follow the course of labor.

With strict adherence to a carefully planned procedure, labor by induction is safe and provides advantages for both patient and physician.

Sparteine sulfate (Tocosamine) is an effective and safe oxytocic for this procedure; it has replaced oxytocin (Pitocin) in our practice.

References

Hall, R. E.: Standard Practices at Sloane Hospital. The Management of the Induction of Labor, Bull. Sloane Hosp. Wom. 7:55-58 (July) 1961.

Niswander, K. R.; Patterson, R. J., and Randall, C. L.: Elective Induction of Labor, Am. J. Obst. & Gynec. 79:797-800 (Apr.) 1960.

Reycraft, J. L.: Induction of Labor, Am. J. Obst. & Gynec. 61:801-808 (Apr.) 1951.

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The Smoking Deterrent Effect of a New Lobeline Dosage Form

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Smoking deterrent therapy is no longer an idle medical curiosity but an urgent need, particularly in private office practice. The only drug that appears to offer any possibility of effectiveness in this area is the alkaloid lobeline, which has been used for this purpose since Dorsey[1] first introduced it in 1936. Since then it has been used by injection, either subcutaneously or intramuscularly, and as an oral medication in the form of a powder, a tincture, and a tablet. Not a few of the reports on its use as an injectable have been favorable,[2-4] but the danger of serious side reactions[5] as well as the absence of controlled studies in the literature has made its use in private practice impractical.

As an oral tablet for smoking deterrence, lobeline has been subjected to a goodly number of controlled studies whose results have largely been negative. Most of these have been concerned with a buffered 2 mg. tablet which, on the basis of a double-blind study, was at first reported as effective in 1955 by Rapp and Olen.[6] Other double-blind studies with this preparation have since been reported in which the placebo was found to be as effective as the active tablet.[7-9]

More recently a cherry-flavored candy pastille (Nikoban*) containing 0.5 mg. of lobeline sulfate has been evaluated by the double-blind method and reported as showing effective results.[10,11] The rationale advanced for the use of lobeline in this dosage and dosage form was threefold: (1) experience with higher dosage levels in which many unpleasant side effects were elicited;[5,12-14] (2) the need for a small dosage which would produce only a tobacco satiety effect and none of the unpleasant side effects; and (3) the use of a sucking type of candy which would imitate the oral activity involved in smoking a cigarette and by this psychomimetic means satisfy the oral gratification craved by cigarette smokers.

Since smoking is a complex psychogenic habit, it seems axiomatic that smoking deterrent therapy should consist primarily of one type of psychotherapy or another. It would also seem to follow that lobeline as a smoking deterrent would, like the anorexigenic drugs in antiobesity therapy, have to be used as part of a therapeutic program rather than allowed to carry the burden by itself, yet the cited reports evaluating oral lobeline as useless[7-9,12,13] have entirely ignored this fact. Since the lobeline pastille appears to have the advantages of reduced lobeline dosage and a "built-in" psychomimetic effect, it would seem to be the most practical form of the drug for use in a smoking deterrent program in a private practice.

Before incorporating it in an active deterrent program, however, I considered it advisable to evaluate the lobeline pastille in a clinical study setting, with the investigator performing only a passive role. Thus such a study would (1) serve to evaluate the effectiveness of the pastille in a situation where the physician, for one reason or another, can play only a subdued role; (2) provide a baseline for further smoking deterrent studies with the pastille as part of an active psychotherapy program; and (3) confirm or deny the results reported by London[10] and Perlstein.[11]

Materials and Methods

A double-blind study of the lobeline pastille was conducted on 104 patients; since three failed to continue with the entire course of therapy, this report is based on the results in 101. There were 49 men and 52 women in the study group ranging in age from 17 to 79. All were strongly motivated to deter their smoking particularly since all had varying degrees of chronic bronchitis with troublesome productive coughs. Twenty-seven of them also complained of varying degrees of hoarseness which were directly attributable to smoking. None showed signs or symptoms of malignant respiratory diseases. All of the patients smoked 15 or more cigarettes a day and were graded according to the magnitude of their cigarette consumption as follows:

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*The lobeline pastilles (Nikoban) were provided for this study by the Medical Department of M. R. Thompson, Inc., New York, N. Y.

Instructor in General Medicine, University of Miami School of Medicine, Coral Gables.

10 to 15 cigarettes a day — moderate
16 to 25 cigarettes a day — heavy
26 to 40 cigarettes a day — very heavy
Above 40 cigarettes a day — inordinate

Fifty-six patients (27 men and 29 women) comprised the active drug group and 45 (22 men and 23 women) the placebo group. The distribution of patients by grade of smoking between the two groups was as follows:

	Lobeline	Placebo
Moderate	3	3
Heavy	16	12
Very heavy	29	23
Inordinate	8	7

The pastilles were administered according to the following four week schedule:

First week: 1 pastille every 1 to 2 hours for a maximum of 12 daily
Second week: 1 pastille every 3 hours
Third week: 1 pastille every 4 hours
Fourth week: 1 pastille every 4 to 6 hours

The patients were given a diary card and asked to record the number of pastilles taken and the number of cigarettes smoked each day. They were also asked to keep a record of the number of times they coughed, and if possible to save the sputum they produced each day of the treatment period. At the end of the study, the average daily number of cigarettes smoked during the fourth week was determined and a "Smoking Index" (S. I.) computed according to the following formula:

$$S.\,I. = \frac{I - F}{F} \times 100,$$

where I equals the number of cigarettes smoked daily prior to the study and F equals the average daily number of cigarettes smoked during the fourth week. The S. I. thus became a quantitation of effectiveness ranging downwards from 100 (no smoking at all) through 50 (smoking half the pretreatment amount) to 0 (smoking the same as the pretreatment amount) and even a minus quantity (smoking more than the pretreatment amount).

The "Smoking Indices" were then grouped in the following response ranges:

Excellent	75 to 100
Good	50 to 74
Equivocal	25 to 49
Failure	0 to 25

The patients were seen at weekly intervals during which their diary cards were reviewed, their questions answered, and various problems discussed. Although the investigator's attitude was optimistic and encouraging, no attempt was made to institute active measures of smoking deterrence other than the use of the pastilles. The patients were encouraged to talk as freely as they wished and to use the investigator as a sounding board and an answer man. The only information volunteered by the investigator concerned the ill effects of smoking in general, the particular ill effects that had to do with an individual patient, and a general explanation of the therapy. The fact that each patient was monitoring his daily cough and sputum production served as a very appropriate theme for these discussions and was instrumental in reinforcing the patient's original motivation without more positive action on the investigator's part.

Results

The results after four weeks of therapy with the pastilles are summarized in table 1:

Table 1. — Summary of Results

	Lobeline	Placebo
Excellent	33.9% (19 patients)	4.4% (2 patients)
Good	44.6% (25 patients)	22.2% (10 patients)
Equivocal	16.0% (9 patients)	31.1% (14 patients)
Ineffectual	5.3% (3 patients)	42.2% (19 patients)

Since it is generally thought that a cigarette smoker cutting down his cigarette consumption by less than half (S. I. of less than 50) will achieve no appreciable physical benefits, these results can be condensed more succinctly thus:

	Lobeline	Placebo
Clinically effective (S. I. 50 to 100)	78.5% (44 patients)	26.6% (12 patients)
Clinically ineffective (S. I. 0 to 49)	21.4% (12 patients)	73.3% (33 patients)

It is of interest that the only instance of an S. I. in the minus range was a placebo patient (-65).

Since the heavy smokers are the thorniest problems, the effects of the lobeline and the placebo pastilles were evaluated in the heaviest smokers, the 47 who smoked more than 25 cigarettes daily. Figure 1 shows the results in this group. These clearly indicate the greater effectiveness of the lobeline pastille, which was clinically effective in 75.6 per cent of the most difficult cases, over the placebo, which was clinically effective in only 20 per cent of these.

No side reactions of any type were reported by either the lobeline or the placebo group.

In all the 56 cases—44 in the lobeline group and 12 in the placebo group—in which smoking indices at the end of the fourth week ranged between 50 and 100, a marked decrease in cough and sputum production was noted. The relationship between the two was a simple linear one: the greater the reduction in smoking volume, the

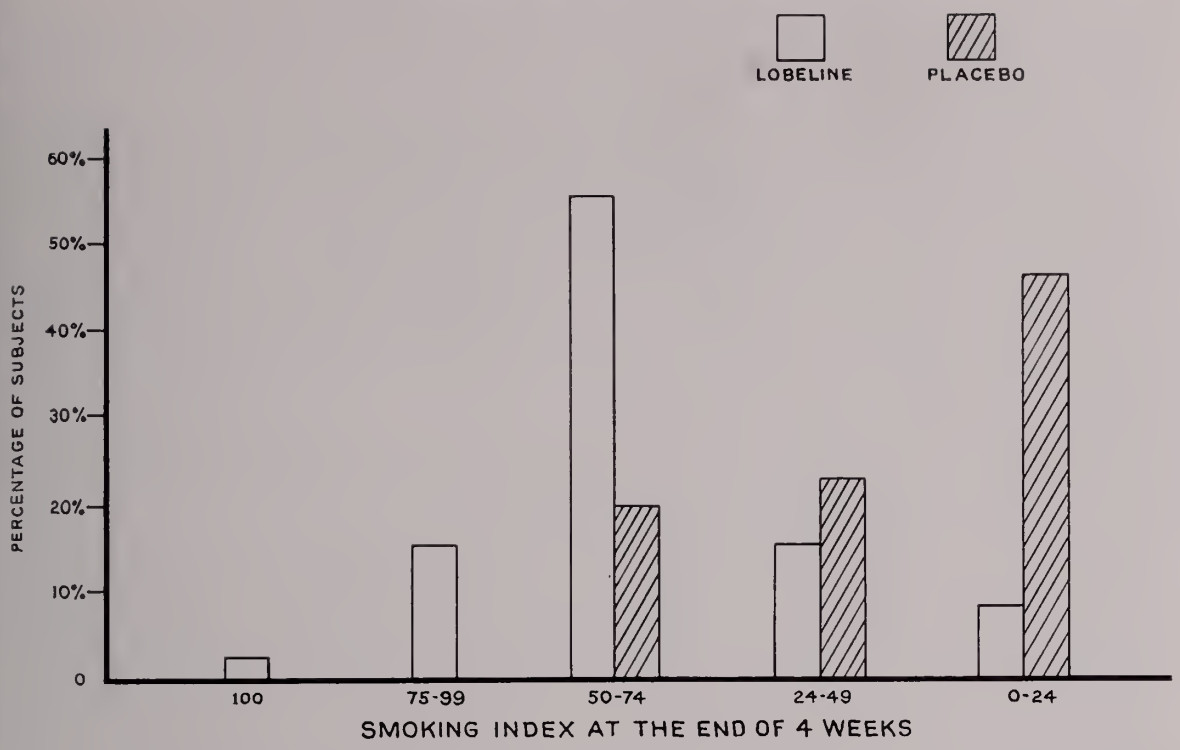

Fig.1 Comparison of results between LOBELINE and PLACEBO among heavy smokers (Over 25 cigarettes daily)

greater the reduction in cough and sputum production; in 100 per cent of the "excellent response" cases (S. I.'s between 75 and 100) the cough disappeared and in roughly 75 per cent the sputum was markedly reduced in volume, lighter in color, and less viscid in consistency. In the cases of this group where hoarseness was also a complaint, this too disappeared. In the vast majority of the 45 cases—12 in the lobeline group and 33 in the placebo group—in which clinical responses were poor (S. I.'s of 0 to 49) there was no change in cough and sputum, or hoarseness when this was present. It was primarily for this S. I. ranged from 25 to 49 was finally evaluated as ineffective.

Discussion

These results confirm the findings of London[10] and Perlstein[11] that the lobeline pastille is significantly more effective as a smoking deterrent than the placebo pastille. Thus the failure of the placebo pastille to achieve comparable results points to the fact that the lobeline provides a considerable degree of pharmacological smoking deterrent activity over and above the placebo effect and the oral gratification inherent in the pastille form alone. This was identified by the vast majority of the patients in the lobeline group as a feeling of having smoked too much resulting largely from a sense of epigastric fullness, whereas none in the placebo group described a similar sensation. Why a number of patients who reported this sensation fell into the clinically ineffective group is undoubtedly a matter of motivation; these patients might very well respond to an active program of psychotherapy.

Since ideal smoking deterrent therapy should strive for complete discontinuance of smoking in most, if not all, patients, these results are obviously not optimum. Nevertheless, if 75.6 per cent of all the heaviest smokers could be helped to reduce their daily cigarette consumption by more than half, this in itself would be a considerable achievement in the reduction of morbidity—and eventually mortality—of the many cardiopulmonary diseases caused or adversely influenced by smoking. But the very nature of the smoking habit calls for a planned program of active psychotherapy if optimum results are to be obtained, and the results reported here indicate that the lobeline pastilles should play an important adjunctive role in such programs, especially if they are to be used in private practice.

Unless they are psychiatrists or have special training in psychosomatic medicine, most private practitioners have neither the time nor the inclination to employ full scale methods of formal psy-

chotherapy in the treatment of the psychosomatic diseases they commonly see. It is almost an axiom in private practice, however, that a drug with an indicated and readily identifiable pharmacological effect facilitates the treatment of these diseases by allowing the physician to build around it a coherent program of superficial psychotherapy which he has found best suited to himself and his practice. This has been the experience of every physician who has successfully treated such entities as obesity, tension headache, the irritable bowel or dysmenorrhea, and should on this same basis be equally successful in the treatment of the smoking habit with the lobeline pastille.

As a result of this study, as well as those of London[10] and Perlstein,[11] it would appear that lobeline may have been an unjustly maligned drug for smoking deterrence and that its effectiveness depends on dosage, dosage form, and therapeutic programming. In actuality, lobeline is not alone in this respect; such useful drugs as digitalis, quinidine, acetylsalicylic acid, chloral hydrate, amphetamine, and emetine were also under palls during their long histories until one or another of these three factors was altered to suit the therapeutic situation. Certainly the data accumulated over the past decade on the pathological effects of smoking no longer justify a nihilistic attitude towards smoking deterrent therapy or towards lobeline if a workable and nontoxic form of the drug is available for general use.

Summary

A pastille containing 0.5 mg. of lobeline sulfate (Nikoban pastilles) was evaluated in a double-blind smoking deterrent study of 101 chronic smokers over a period of four weeks.

Of the smokers in the lobeline group, 78.5 per cent reduced their smoking by more than half; of those in the placebo group, only 26.6 per cent reduced their smoking by more than half.

Among the heaviest smokers—more than 25 cigarettes daily—75.6 per cent of those in the lobeline group and 20 per cent of those in the placebo group reduced their smoking by more than half.

Most of the subjects who were enabled to reduce their smoking by more than half over the four week period reported a marked reduction in cough and sputum production; when present in these cases, hoarseness disappeared completely.

No side effects were experienced from either the lobeline or the placebo pastille.

On the basis of these results, the lobeline pastille appears to have a significant pharmacological smoking deterrent effect over and above the placebo effect of the pastille dosage form itself.

References are available from the author upon request.

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Clinical Evaluation of Metronidazole Therapy for Vaginal Trichomoniasis

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Trichomonal infestation is among the most common causes of vaginitis. It has been estimated that one of every five women has trichomoniasis.

The treatment of genital trichomoniasis in the female has long been a dilemma to the gynecologist. Until recently, all methods for the treatment of trichomoniasis in women have employed a variety of local therapeutic agents which may give temporary relief of aggravating symptoms, yet fail to eradicate the protozoon from the vaginal tract. The very fact that so many preparations are currently on the market indicates that no treatment of this condition has been satisfactory. With the increasing conviction that the resistance of the Trichomonas vaginalis organism to therapy is due both to its venereal transmission by the male and to its ability to live in the female bladder, urethra and paraurethral glands, the necessity for some form of systemic therapy applicable to both male and female patients has become apparent.[1,2] The purpose of this paper is to report my experience with a new oral trichomonacidal agent, metronidazole (Flagyl).

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The metronidazole (Flagyl) used in this study was supplied by G. D. Searle & Company, Chicago.

Material and Method

In June 1960, as part of a clinical study to evaluate the effectiveness of a systemic drug in eradicating trichomonal vaginitis, I received a limited supply of metronidazole. Fifty private female patients and 23 husbands of the married patients were treated with this trichomonacide.

In this study, the diagnosis of trichomoniasis was confirmed in every patient by examination of a fresh saline suspension of the vaginal secretions. No patient was treated on clinical findings alone. The husbands were treated empirically with no studies.

The majority of the patients were treated with a combination of the oral tablets and vaginal suppositories. One course of therapy consisted of 250 mg., three times daily by mouth, and one 500 mg. vaginal suppository at bedtime, concurrently for 10 consecutive days. A smaller group and the husbands were treated with the oral tablets alone, one 250 mg. tablet three times daily for 10 days. No other medication was permitted during this period. The patients were asked to refrain from douching or coitus. They were informed of the possible side effect of the medicine and asked to return in two weeks for examination.

The duration of the infection was determined from the history of the symptoms, which included burning, itching, pain and/or leukorrhea (table 1). Twenty-six patients had been treated intermittently by other physicians with a variety of local agents. Fourteen patients had been treated for more than two years.

Table 1

Duration of Symptoms	Number of Patients
Unknown	3
Less than 1 month	5
1 - 6 months	8
6 - 12 months	5
1 - 3 years	11
3 - 8 years	10
Total	42

Results

Of the 50 patients treated, eight failed to return for follow-up. The remaining 42 patients have been followed from two weeks to three and one-half years (table 2). Twenty-eight were treated with oral tablets and vaginal suppositories, and 14 were treated with the oral tablets alone. There were no failures when the patients were examined at the end of two weeks. All the patients were relieved of their symptoms. Wet smear examination of vaginal secretions revealed all patients to be parasitologically cured. Blood studies before and after treatment on 16 patients failed to reveal evidence of bone marrow depression.

Table 2

Follow-up	Number of Patients
2 - 4 weeks	13
1 - 4 months	7
8 - 11 months	3
1 - 2 years	11
2½ - 3½ years	8
Total	42

There were no side effects which required an interruption of the medication. A generalized pruritic rash developed in one patient, which subsided after completion of the therapy. Five patients were found to have a Monilia infection on follow-up examination. Except in one patient the moniliasis was asymptomatic. All responded to treatment. Two patients were pregnant. Neither experienced adverse reactions and both delivered normal infants. Four patients had late recurrences of Trichomonas vaginalis from 12 to 18 months after treatment. Because of the long interval since therapy these recurrences were thought to represent reinfection. All were successfully retreated with metronidazole.

Discussion

Durel and his associates[3] in 1959 were the first to report the use of metronidazole in the treatment of trichomonal vaginitis. The results were excellent. Since that time more than 100 clinical studies have been published in the United States, Canada and Europe. Most authors reported cure rates of well over 90 per cent. Side effects were few and minor. The most common were related to the gastrointestinal tract, and less frequently urticaria and pruritus occurred.

In this study, metronidazole was administered to 50 female patients with microscopically confirmed trichomonal vaginitis and to 23 male consorts. In my experience this drug has proved to be a safe and efficient therapy for trichomonal vaginitis. Of the 42 patients who returned for follow-up examination, all were free of the infection. Late recurrences in four patients most probably were reinfections. Two of these patients were known to be promiscuous, one was suspected of being promiscuous, and one was reinfected after marriage. Except for mild urticaria and pruritus experienced by one patient, no ill effects from the medication were noted.

Because metronidazole passes readily to the fetus, it is recommended that the drug not be

given in pregnancy. There are, however, a number of reports[1,2,4-7] of women having been treated during pregnancy without any evident ill effects to the fetus. Two of my patients were pregnant when treated and delivered normal infants.

In this study there was no evidence that the combined oral and vaginal therapy was superior to the oral therapy alone. If the infection fails to respond to the oral tablets, it is recommended that the combined therapy be employed when retreating the patient.

Summary

As judged by studies on a small group of 42 female patients, metronidazole is an effective trichomonacide. After one course of therapy, all of these patients were free of trichomonads.

The drug is safe and well tolerated. No evidence of true toxicity or hematologic alterations was observed except for mild urticaria and pruritis experienced by one patient.

The oral therapy alone seems to be as effective as the combined oral and vaginal therapy.

As indicated by a number of studies, because genital trichomoniasis in the female is a communicable disease usually transmitted by sexual intercourse, it would seem advisable to treat the male partner when one exists.

References

1. Luthra, R., and Boyd, J. R.: Treatment of Trichomoniasis with Metronidazole, Am. J. Obst. & Gynec. 83:1288-1293 (May 15) 1962.
2. Perl, G., and Ragazzoni, H.: Flagyl in Treatment of "Trichomonas Vaginalis" Vaginitis, Am. J. Obst. & Gynec. 19:595 (May) 1962.
3. Durel, P.; Roiron, V.; Siboulet, A., and Borel, L. I.: Clinical Trial of a Trichomonacidal Derivative of Imidazole, presented before the French Gynecological Society, Jan. 19, 1959; Study of an Imidazole Derivative (R. P. 8823) as Antitrichomonas Agent, Compt. rend. de la Societé Francaise de Gynecologie 29:36, 1959; Rev. Prat. 9:25-28, 1959.
4. Hesseltine, H. C., and Lefebvre, Y.: Treating Vaginal Trichomoniasis with Metronidazole, J. A. M. A. 184:1011-1013 (June 29) 1963.
5. Lyon, F. A.; Sinykin, M. B., and Barr, M. M.: Trichomonal Vaginitis Treated with Metronidazole, Am. J. Obst. & Gynec. 85:955-958 (Apr. 1) 1963.
6. Schram, M., and Kleinman, H.: Use of Metronidazole in the Treatment of Trichomoniasis, Am. J. Obst. & Gynec. 83:1284-1287 (May 15) 1962.
7. Williams, B. F. P.: Metronidazole in Treatment of Trichomonal Infections, A Clinical Study, Am. J. Obst. & Gynec. 20:611-613 (Nov.) 1962.

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Ascending Pyelonephritis

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The exact role of ascending infections in the development of pyelonephritis has not been adequately defined. Standard textbooks and manuscripts which refer to this subject list the pathogenesis of pyelonephritis as hematogenous, lymphogenous and direct ascent. Of these, perhaps the last is least understood.

In a previous article[1] it was suggested that some incidence of pyelonephritis, in adults, may be due to unrecognized vesicoureteral reflux, which indeed may have been present since childhood. The striking similarity in histories, clinical findings, and pyelographic studies in some adults with unilateral or bilateral pyelonephritis and children with vesicoureteral reflux is more than coincidental.

It is the purpose of this paper to present four representative cases to illustrate and to emphasize the importance of a thorough and exhausting urological investigation when pyelonephritis is present.

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Report of Cases

Case 1.—A four year old girl was admitted to the hospital with a history of recurrent urinary tract infections, characterized by fever and frequency of urination. The first episode occurred at the age of nine months. During this period she had repeated urological investigations, including three cystoscopic procedures. She had received a course of urethral dilatations and had been treated with antibiotics for long periods.

On physical examination the temperature was 98.5 F., pulse rate 120 per minute, respirations 28 per minute, blood pressure 120 mm. Hg systolic and 80 mm. Hg diastolic. She was a small, thin, pale child.

Laboratory studies showed a hemoglobin estimation of 11.4 Gm. and a white blood cell count of 9,300 per cubic millimeter. Urinalysis revealed 35 to 40 white blood cells and 2 to 3 red blood cells per high power field. There was no growth from the urine culture. The nonprotein nitrogen level was 50 mg. per hundred milliliters. The phenolsulfonphthalein test gave an appearance time of 10 minutes with a total of 50 per cent excretion in two hours. Intravenous pyelograms showed blunting of the calyces bilaterally with some dilatation of the pelvis and ureters. The renal cortices appeared thin (fig. 1A). A cystogram demonstrated immediate bilateral ureteral reflux with dilatation and tortuosity of the ureters (fig. 1B). On cystoscopy no trabeculation of the bladder was present. There was no residual urine. There were inflammatory granulations and cysts over the trigone and around the vesical outlet. The ureteral orifices appeared large and patulous. The vesical neck appeared open. The preoperative diagnosis was bilateral vesicoureteral reflux and advanced chronic pyelonephritis.

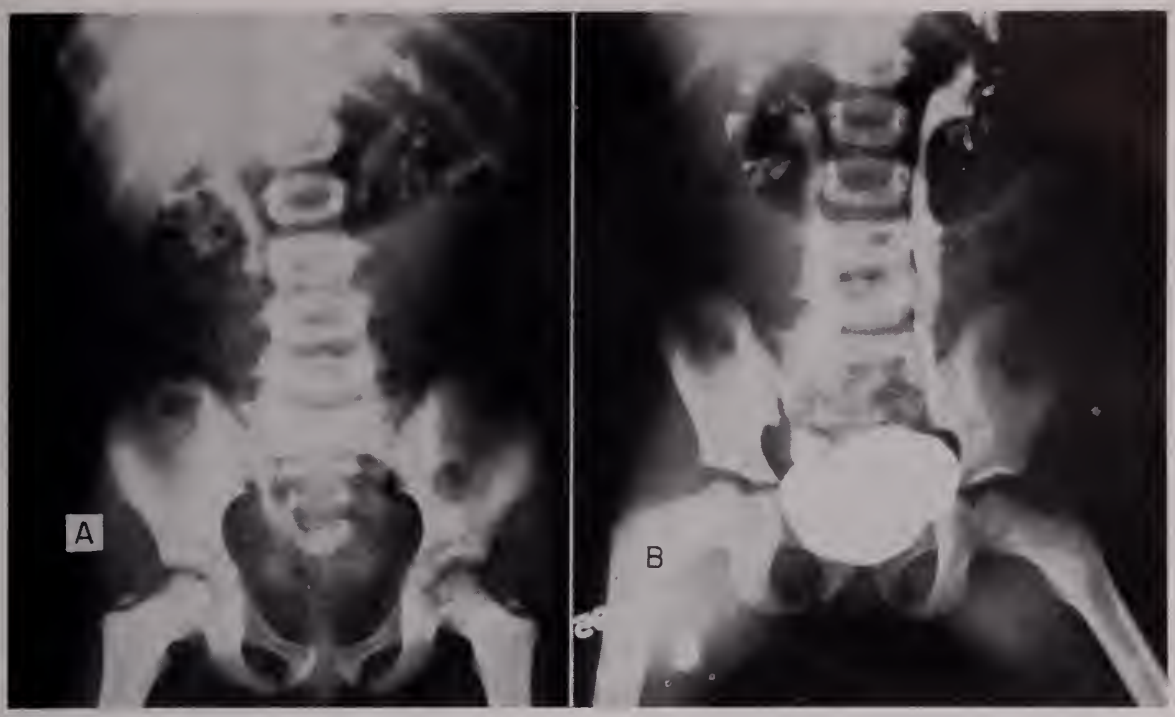

Fig. 1.—A. Excretory pyelogram shows bilateral blunting of the calyces and dilatation of the pelvis. B. Cystogram demonstrates immediate bilateral reflux with dilatation of the ureters.

Treatment consisted of bilateral reimplantation of the ureters by a submucosal tunnel technique.[2] This successfully corrected the vesicoureteral reflux. Within six months following reimplantation of the ureters, the phenolsulfonphthalein excretion had improved to 75 per cent in two hours. The blood urea nitrogen was 13 mg. per hundred milliliters. The urine was microscopically negative, and urine cultures showed no growth. This child has been followed four years and has remained uninfected, asymptomatic and free of vesicoureteral reflux.

Case 2. — A 39 year old woman was referred with a diagnosis of congenital polycystic kidney disease. She gave a history of urinary tract infections throughout her life. In addition to frequent episodes of irritative bladder symptoms characterized by increased frequency and urgency, she complained of pain in the flank bilaterally, more severe on the right. She had been on long term antibiotic therapy and chemotherapy without appreciable improvement in the pyuria.

On physical examination the temperature, pulse and respirations were normal. The blood pressure was 124 mm. Hg systolic over 80 mm. Hg diastolic. There was tenderness in the upper quadrants of the abdomen and bilaterally in the costovertebral angle. No abdominal masses were felt.

Laboratory studies revealed a hemoglobin level of 12 Gm. The white blood cell count was 17,200 per cubic millimeter. The urine showed one plus protein and was loaded with white blood cells and bacilli. The blood urea nitrogen was 28 mg. per hundred milliliters. The phenolsulfonphthalein excretion was 13 per cent in two hours with a flat curve. Urine cultures grew Bacillus pyocyaneus with in vitro resistance to all antibiotics. Intravenous pyelograms were not obtained because of a previous severe sensitivity reaction to the contrast material. Retrograde pyelograms demonstrated typical bilateral pyelonephritis with lengthening and narrowing of the infundibula, marked blunting of the calyces, and loss of renal parenchyma (fig. 2A). A cystogram demonstrated immediate bilateral reflux, more marked on the right (fig. 2B). Residual urine on three occasions ranged from 150 to 200 cc. Cystoscopic examination revealed a contracture of the vesical outlet with mild trabeculation of the bladder base. The ureteral orifices were large and patulous. The diagnosis was vesical neck obstruction, bilateral vesicoureteral reflux and chronic bilateral pyelonephritis.

Treatment consisted of transurethral resection of the vesical neck with dilatation of the urethra in an effort to reduce voiding pressures as much as possible. The residual urines have been reduced to between 15 and 30 cc. The pain in the flank has been less severe. The patient has been followed closely during the last two years. There has been no improvement or deterioration of kidney function as measured by phenolsulfonphthalein excretion and blood urea nitrogen. She has been receiving chemotherapy and antibiotics alternately to maintain a sterile urine.

Case 3. — A seven year old child was admitted with a four year history of repeated attacks of cystitis, characterized by urgency, increased frequency and burning on urination. These attacks were usually accompanied by fever. With the more recent episodes she experienced pain in the flank. Her mother volunteered that this pain seemed to be associated with a full bladder and was relieved by voiding. The child had been followed at various Naval installations and several urological surveys had been performed. She had been on some form of chemotherapy or antibiotics almost constantly during the preceding two years.

On physical examination the temperature, pulse and respirations were normal. The blood pressure was 90 mm. Hg systolic and 55 mm. Hg diastolic. The general examination was within normal limits.

Laboratory studies revealed a hemoglobin level of 13.1 Gm. The white blood cell count was 5,000 per cubic millimeter. The urine showed a trace of albumin, 4 to 5 white blood cells, no red blood cells and a few bacilli per high power field. Urine culture grew Escherichia coli. The nonprotein nitrogen was 31 mg. per hundred milliliters. Excretory urograms showed enlargement of the right kidney with good function. The calyces were delicate. The left kidney was small and the calyces were blunted (fig. 3A). A cystogram demonstrated immediate ureteral reflux to both kidneys (fig. 3B). On cystoscopic examination the bladder mucosa was hyperemic. No trabeculation was present. Both ureteral orifices were large, and gaping. There was no obvious obstruction at the

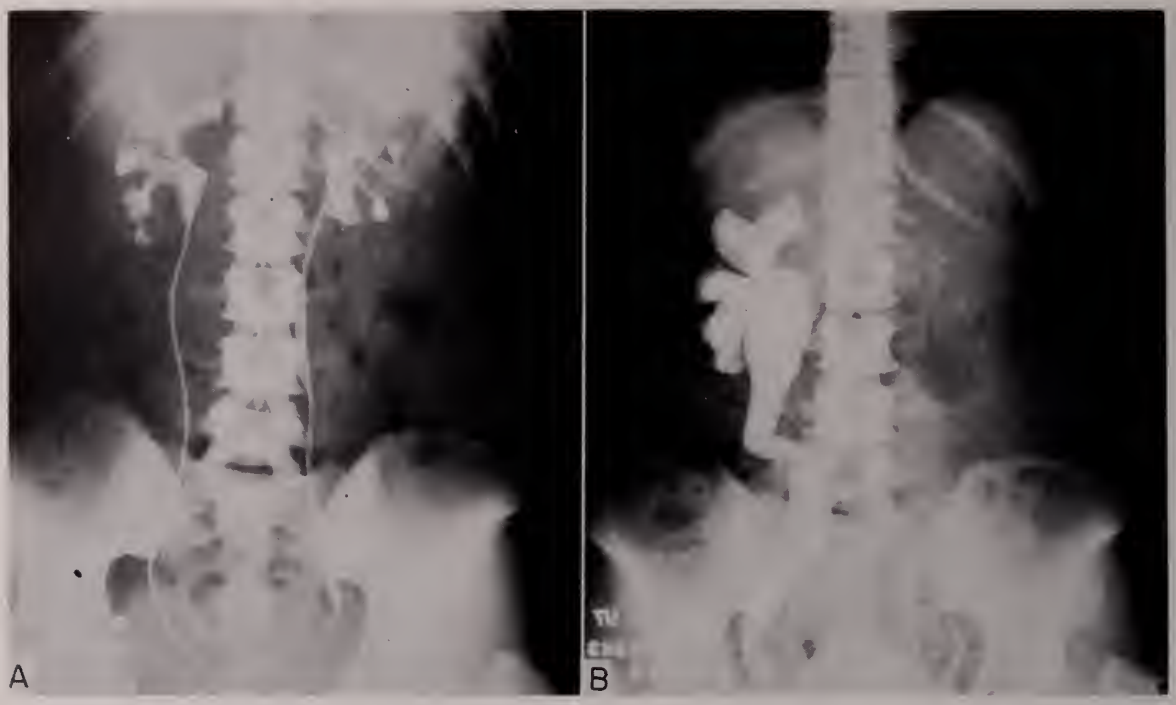

Fig. 2.—A. Retrograde pyelogram is typical of pyelonephritis with lengthening and narrowing of infundibula, blunting of calyces and loss of renal parenchyma, and is an adult version of figure 1A. B. Cystogram demonstrates bilateral reflux.

vesical neck. No residual urine was present on two occasions. The diagnosis was bilateral vesicoureteral reflux and atrophic pyelonephritis on the left side.

Treatment consisted of reimplantation of the right ureter by a submucosal tunnel. Three months later a nephrectomy was performed. The reimplantation corrected the reflux. The patient has been followed for five years and has remained asymptomatic and without recurrence of reflux.

Case 4.—A 17 year old girl was admitted for evaluation of hypertension. At the age of 14, she complained of bitemporal throbbing headaches and was found to have hypertension. The blood pressure was only partially controlled by medications and she was referred for additional hypertensive studies.

On examination the blood pressure was 200 mm. Hg systolic over 140 mm. Hg diastolic. The pulse rate was 112 per mintue. The remainder of the general physical examination was within normal limits.

Laboratory studies which included blood chemistries, catecholamines and phentolamine (Regitine) tests were normal. The urine was negative for protein and sugar, and contained 10 to 15 white blood cells and numerous bacilli per high power field. Urine culture grew E. coli. On intravenous pyelography the left kidney was considerably smaller than the right. There was blunting of the calyces on the left consistent with pyelonephritis (fig. 4A). A cystogram demonstrated reflux to the left kidney (fig. 4B). Differential renal studies showed a pronounced difference in volume output. The right kidney excreted 50 cc. while the left kidney excreted only 20 cc. in a 30 minute period. The urinary sodium excretions were equal. An aortogram showed slight tortuosity of the left renal vessels but no constrictions. The preoperative diagnosis was left vesicoureteral reflux with chronic atrophic pyelonephritis. Cystoscopic examination revealed a normal bladder. No trabeculation or evidence of vesical neck obstruction was present. The ureteral orifices were grossly normal. No residual urine was present. Treatment consisted of a nephroureterectomy on the left side.

It should be emphasized that the nephrectomy was performed for the urological condition present and not because of the hypertension. There has, however, been some improvement in the blood pressure. The most recent recording, eight months postoperatively, was 160 mm. Hg systolic and 90 mm. Hg diastolic.

Discussion

It is unlikely that urine and bacteria can ascend through an entirely normal intramural ureter in man. Many studies[3-5] support this view; yet there can be little doubt that ascending infections do occur, suggesting some temporary or permanent alteration in function of the intravesical ureter or ureterovesical valve under certain conditions. It is generally agreed that the length of the intravesical ureter is of paramount importance in the effective maintenance of its valvelike activity. Gruber[6] demonstrated that there is considerable variation in the length of the intravesical ureter ranging from 5 to 26 mm. in length. The author's studies of the intramural ureter at postmortem examinations have demonstrated a range in length from 3 mm. in the patulous refluxing ureter to as great as 36 mm. There also have been significant differences in the length of the ureterovesical junction on opposite sides in the same person. This difference in length may be an explanation of unilateral reflux. Thus, between the grossly abnormal, freely regurgitating ureter with a length of only a few millimeters and the completely normal nonregurgitating ureter with a length of 20 or more millimeters there is a large

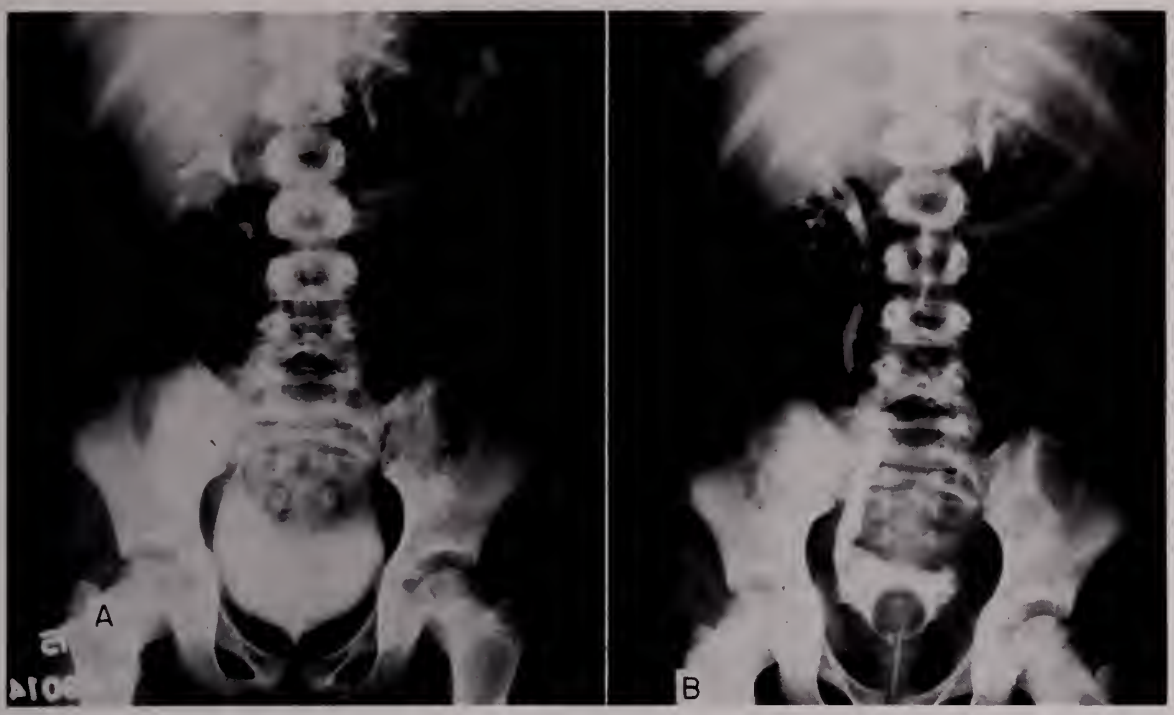

Fig. 3.—A. Excretory pyelogram shows a slightly enlarged right kidney and a small atrophic left kidney. B. Cystogram demonstrates bilateral vesicoureteral reflux.

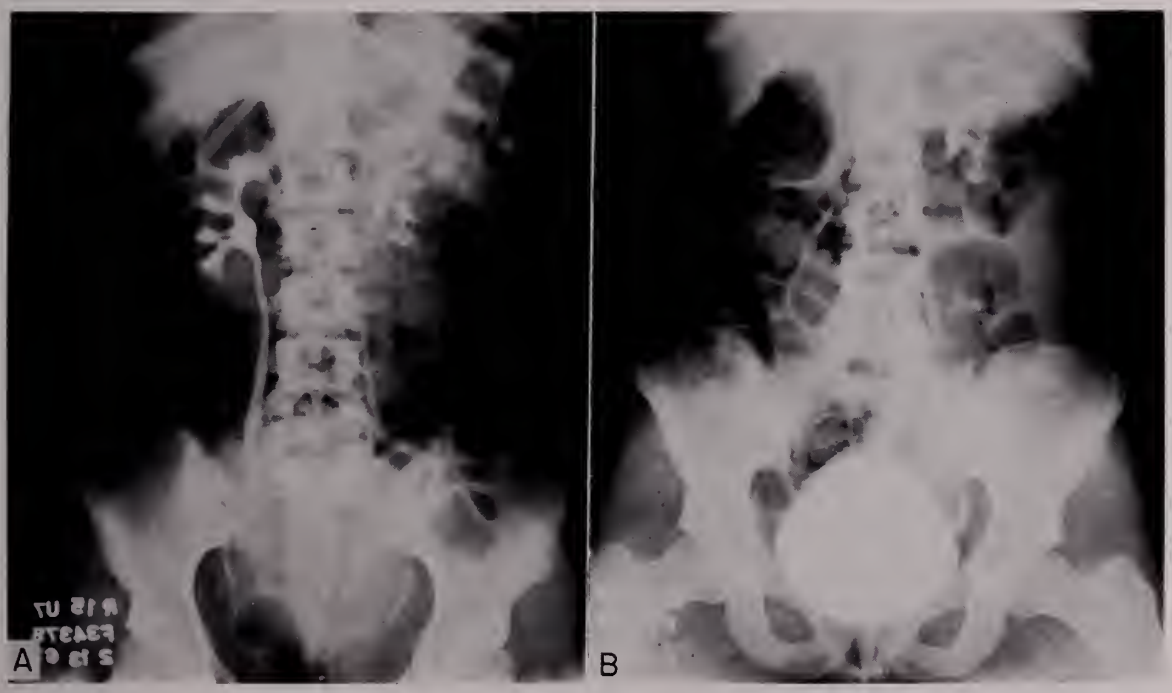

Fig. 4.—A. Excretory pyelogram is comparable to figure 3A and demonstrates enlargement of the right kidney with atrophic pyelonephritis on the left. B. Cystogram shows reflux to the atrophic left kidney.

group with "borderline" or "marginal" valvular mechanisms. This marginal group under normal conditions functions satisfactorily and resists or prevents the regurgitation of urine from the bladder to the kidney. These, however, may become intermittently regurgitating ureters with the slightest alteration in vesical function as with cystitis, overdistention from delay in voiding or retention following anesthesia and surgery. This marginal group may not sustain even the slightest increase in intravesical voiding pressures produced by mild contractures of the vesical neck, urethral strictures, urethral stenosis or resistance to voiding produced by edema of the urethra from trauma as may occur in the newly wed woman.

It is not to be construed that the foregoing is the only explanation or cause of vesicoureteral reflux or pyelonephritis. Other causes of reflux have been discussed in previous publications.[1,7]

Management

The management and treatment of acute, recurrent or chronic pyelonephritis should not terminate with antibiotic therapy or chemotherapy, but rather the patients in such cases should be subjected to a thorough urological study. This should include intravenous urography and retrograde catheterization when indicated. Cystoscopy should be performed with careful inspection of the ureteral orifices, vesical outlet and urethra. The urethra should be calibrated for any evidence of strictures or stenosis. Repeated voiding cystograms or cineradiographic studies of the bladder and urethra should be made to rule out vesicoureteral reflux. The recording of intravesical voiding pressures may be most informative.

Recurrent ascending infections in this "marginal" group can often be eliminated by decreasing voiding pressures and reducing peripheral resistance to the outflow of urine. This objective can occasionally be accomplished with urethral dilatations, transurethral resection or Y-V-plasty of the vesical neck. In the large freely regurgitating ureters, reimplantation may be necessary.

Summary

The cases of four patients, two children and two adults, with similar histories and pyelographic findings are presented. The histories and findings in the adults suggest unrecognized vesicoureteral reflux from childhood. An explanation for ascending infections is offered, based on the variation in length of the intravesical ureter. The necessity of a complete urologic investigation in acute, recurrent and chronic pyelonephritis is emphasized.

References

1. Politano, V. A.: Vesicoureteral Reflux in Children, J. A. M. A. 172:1252-1256 (Mar. 19)1960.
2. Politano, V. A., and Leadbetter, W. F.: An Operative Technique for Correction of Vesicoureteral Reflux, J. Urol. 79:932-941 (June) 1958.
3. Sampson, J. A.: Ascending Renal Infection with Special Reference to Reflux of Urine from Bladder into Ureters as Etiological Factor in Its Causation and Maintenance, Bull. Johns Hopkins Hosp. 14:334, 1903.
4. Bunge, R. G: Further Observations with Delayed Cystograms, J. Urol. 71:427-434 (Apr.) 1954.
5. Leadbetter, G. W. Jr., Duxbury, J. H., and Dreyfuss, J. R.: Absence of Vesicoureteral Reflux in Normal Adult Males, J. Urol. 84:69-70 (July) 1960.
6. Gruber, C. M.: Comparative Study of Intra-vesical Ureters (Ureterovesical Valves) in Man and in Experimental Animals, J. Urol. 21:567-581 (May) 1929.
7. Politano, V. A.: The Significance of Vesicoureteral Reflux in Children, North Carolina M. J. 19:297-304 (Aug.) 1958.

University of Miami.

YOUR OPINION IS NEEDED

READ, COMPLETE AND MAIL

QUESTIONNAIRE ON PAGE 70A

Carcinoma In Situ of Bronchus

EDITED BY
JOHN J. FOMON, M.D.
MIAMI

DR. JOHN J. FOMON: The patient is a private patient of Dr. Cooke's. Dr. Cooke, will you tell the Conference about the problem?

DR. FRANCIS N. COOKE: The patient is a 60 year old white man. I saw him last May because of atelectasis of the basilar segments of the lower lobe of the right lung. The chest film was not diagnostic of tumor, but on bronchoscopy we obtained a positive diagnosis of squamous cell carcinoma. Previously, cytology on the sputum was suspicious for carcinoma. Surgery was performed at Doctor's Hospital, Miami. We took out a tumor of the lower lobe by going through the intermediate bronchus on the right side, thus resecting the middle and lower lobe. This is the problem: The patient is a well preserved male and quite cooperative. The pathology report from Doctor's Hospital indicated that the resected mediastinal lymph nodes did not contain tumor. The tumor itself was diagnosed as a grade 2 to 3 bronchogenic carcinoma. The patient has emphysema and postoperatively had an air leak. The pathologist determined that the proximal bronchus was free of tumor for a distance of 0.9 cm. Proximal to the carcinoma, however, in the proximal stump, he noted skip areas and found foci of carcinoma in situ. This finding was disturbing; so in November of last year the patient was hospitalized and again bronchoscoped. Grossly, the stump appeared well healed except for the presence of two sutures which were removed. Biopsy at this time showed acute bronchitis and fragments of squamous cell carcinoma in situ.

At this point, I asked one of the x-ray therapists to treat the patient. I do not want to misquote him, but he gave the impression that the diagnosis of carcinoma in situ was not really a diagnosis of carcinoma. Is this the thinking of the x-ray therapist? This month we again bronchoscoped the patient, and the biopsy report came back as squamous cell metaplasia with focal inflammation and severe atypia. The stem bronchus on the left was also biopsied in an effort to find out if this was a diffuse process. This latter biopsy was insufficient for diagnosis. My question to this group, and I want opinions from the x-ray people: If this is carcinoma in situ, is not this the time to treat it with x-ray therapy?

(The patient was brought into the Conference room at this time.)

DR. COOKE: This is our Tumor Conference, Mr. X., and I have just presented your case. These gentlemen may wish to ask you some questions.

DR. VICTOR D. DEMBROW: How much smoking did you do before your surgery?

MR. X.: Several packs a day.

QUESTION FROM AUDIENCE: For how many years?

MR. X.: Quite a few years. Following my operation I stopped completely.

QUESTION FROM AUDIENCE: No positive nodes were found at the time of the original surgery?

DR. COOKE: The lesion was localized and well circumscribed. Except for the question of in situ changes, his prognosis should be extremely favorable. Are there any other questions you would like to ask him?

QUESTION FROM AUDIENCE: Is he completely asymptomatic now?

DR. COOKE: He has a slight cough. When is the last time you coughed up any blood?

MR. X.: It has been quite a while. Actually I have not coughed up pure blood.

DR. COOKE: Blood-streaked sputum is not unusual following pulmonary resection and is often seen when granulation tissue develops around the sutures closing the bronchial stump.

From the Tumor Clinic and Conference and the Department of Surgery, University of Miami School of Medicine and Jackson Memorial Hospital, Miami. The Clinic and Conference receive additional support from the Florida State Board of Health and the Florida Division of the American Cancer Society. The following case was presented on Feb. 12, 1963.

(At this point the patient was ushered out of the Conference room.)

Dr. Fomon: Dr. Cooke, let me ask you a question before we get opinions. Clinically, is his pulmonary function good enough so that he could tolerate a completion of a pneumonectomy on the right?

Dr. Cooke: Yes, I think so. He has not had pulmonary function studies postoperatively, and I would dislike to reduce further his ventilatory function.

Dr. Fomon: I think we have several points to consider. One is obviously the problem of differentiating between carcinoma in situ and squamous cell metaplasia. This differentiation is sometimes a difficult one. At Doctor's Hospital the biopsy was called squamous cell carcinoma in situ. In this institution the pathologists were apparently less certain and suggested that there was squamous metaplasia with atypia. Dr. Cooke has attempted to do the thing that I wondered about. I would be interested in knowing whether any changes are present in the remainder of the tracheobronchial tree. If these changes are limited to the intermediate bronchial stump on the right, we have an entirely different situation than if it is a diffuse process. It seems that we might entertain suggestions for determining whether or not this is truly carcinoma in situ or whether it is squamous cell metaplasia. Are changes in bronchi reversible after cessation of smoking? Next, perhaps we can have suggestions about determining whether this is a diffuse process or one that is localized to the bronchial stump. Finally, should it be determined that the patient does indeed have squamous cell carcinoma in situ and it is found to be limited to the bronchial stump, it would seem that there are three possibilities: (1) to observe the patient, (2) to offer radiation therapy, and (3) to offer completion of the pneumonectomy. Who would open the comments?

Dr. Dembrow: I believe that if this area were to be radiated, supervoltage would be necessary and the dose would have to be between 5,000 r and 6,000 r to control a carcinoma. This dose would, I believe, destroy most of the functioning lung tissue, especially in an emphysematous patient, and there would be a great deal of fibrosis. I would be against giving 6,000 r in this situation where the diagnosis of carcinoma is questionable. Is it a tremendous burden to this patient for him to have bronchoscopy repeated?

Dr. Cooke: I have bronchoscoped him three times since November of last year. All the reports are the same. To repeat my question: Is carcinoma in situ really carcinoma? Why are the x-ray therapists so silent? When I talked to them, they said that carcinoma in situ was not a diagnosis of carcinoma. They asked why they should treat it. I might mention that sputum cytologies since operation have remained suspicious for tumor cells.

Dr. Mario Vuksanovic: There has been considerable controversy about the significance of histological changes found in the tracheobronchial trees of chronic smokers. For this reason I can understand why the x-ray therapist questioned this diagnosis as really representing carcinoma. We do not know for certain, but we have no reason to assume that carcinoma in situ in a bronchus is different from carcinoma in situ in other areas where it has been well studied. This diagnosis is a definite clinical entity in other areas and probably is here. I am sorry the pathologist is not here to comment. I believe that it is difficult to differentiate between metaplasia in a chronic smoker and carcinoma in situ. There can be no question that all invasive carcinomas start somewhere, possibly as carcinoma in situ. After having just said this, I would also emphasize that there is considerable doubt if it is reasonable to treat carcinoma in situ in this patient with radiation therapy. If we were to treat this patient, we would have to decide on the dose, the field size and the area that should be treated. I would wonder if we should treat the opposite lung because there is everything to suggest that in heavy smokers one could find changes compatible with carcinoma in situ throughout the tracheobronchial tree.

Dr. George Kleinfeld: I agree that the crux of the matter is the pathological interpretation. The spectrum of epithelial changes in heavy smokers varies from minor atypias, to squamous metaplasia, to actual in situ mitotic changes. I would agree that we should get more biopsies to assess the change not only in the bronchial stump but in the opposite bronchus. I believe the patient should be treated only if there is truly invasive carcinoma.

Dr. Fomon: Dr. Chandler, do you have a thought?

Dr. J. Ryan Chandler: I would be reluctant to have this patient treated with radiation. I believe a reasonable plan would be to broncho-

scope him every three months and to withhold further therapy until there was something to see on bronchoscopy.

Dr. Dembrow: When this situation occurs on the vocal cord, a compromise procedure is worth while. The mucosa can be stripped and in this manner the in situ change removed. Here a compromise procedure is impossible. This brings me to the point that I do not believe that radiation therapy is a compromise. I believe it holds as much risk to the patient as a thoracotomy and I personally would withhold thoracotomy until there is a definite evidence of invasive tumor and then attempt to complete the pneumonectomy.

Dr. Chandler: Would you ever treat a small bronchogenic carcinoma with radiation as the treatment of choice? What would be your chances of success?

Dr. Vuksanovic: Radiation therapy can be curative for small lesions, but I would not like to offer it as the best treatment for bronchogenic carcinoma. The best chance of cure for small lesions is good surgery. Certainly in larger lesions x-ray therapy has been unable regularly to sterilize the tumor completely, but in some instances preoperative radiation therapy has made a nonresectable bronchogenic carcinoma resectable.

Dr. Cooke: Would you treat in situ carcinoma of the cervix with radiation therapy?

Dr. Vuksanovic: Definitely not. We would prefer that the surgeon treat the patient. Surgery is the treatment of choice.

Dr. Fomon: I am not certain that anyone knows what happens to bronchogenic carcinoma in situ, and it may be improper to compare it to the same lesion in the cervix. In other anatomical locations it is not unusual to find areas of carcinoma in situ adjacent to large invasive carcinoma. In the tracheobronchial tree it is even harder to diagnose carcinoma in situ, and the evidence is not incontrovertible that carcinoma in situ does go on to invasion. I can see Dr. Cooke's concern. If carcinoma of the lung is to be cured, it must be treated early, and certainly there is nothing earlier than carcinoma in situ. I can also understand the views expressed against the use of x-ray therapy because this would seem to be rather strenuous therapy. It seems to me there are really two choices. One is perhaps to complete the pneumonectomy and the other is to observe the patient. We would hate to complete the pneumonectomy if these changes were present throughout the other areas of the tracheobronchial tree. I wonder if we cannot make the recommendation from the Conference that the patient be bronchoscoped every three months and biopsied. If these areas of in situ change persist and if there are no similar areas in the tracheobronchial tree, completion of the pneumonectomy might be considered.

Dr. Cooke: Thank you very kindly, but my question still remains unanswered. Perhaps it is unanswerable. Carcinoma in situ lacks mass. Might not x-ray doses that are sublethal for invasive squamous cell carcinoma of the bronchus be lethal for an in situ change where cells are only one or a few layers thick?

Participants from the Department of Surgery: Drs. Chandler, Cooke, Dembrow, Fomon, and Kleinfeld; from the Department of Radiology, Dr. Vuksanovic.

Your Opinion Is Needed

Read, Complete and Mail

Questionnaire on Page 70a

A Radiologic Consultation
Acute Abdominal Pain

A 31 year old resident came to the emergency room complaining of abdominal pain. Forty-eight hours prior to admission, onset of mild aching generalized abdominal pain with nausea, but no vomiting, had occurred. There was no change in normal bowel habits. On the afternoon of admission the pain became localized to the right lower quadrant and increased in intensity. He had noted an elevated temperature (100 F.) the night before admission. The past medical history was interesting in that a diagnosis of "appendicitis" had been made at the age of 10, but without surgical intervention. Since that time there had been intermittent episodes of lower abdominal pain lasting for 10 to 12 hours every three to four months.

The pertinent physical findings were related to the abdomen. The abdomen was flat and soft without evidence of guarding. No rebound tenderness could be elicited. A poorly defined mass was present in the right lower quadrant with rather marked tenderness over McBurney's point.

The laboratory examination revealed a normal urinalysis. The hematocrit reading was 45 per cent, and the white blood cell count was 15,500 with a normal differential.

On x-ray examination, a supine film of the abdomen revealed a coprolith in the right lower quadrant (fig. 1). A diagnosis of acute appendicitis was made.

At surgery a retrocecal appendix measuring 10 cm. in length and approximately 3 to 4 cm. in width was found. It was densely adherent to the posterior wall of the cecum and was surrounded by marked inflammatory reaction. The pathologic examination of the operative specimen revealed the tip of the appendix to be ulcerated and the lumen filled with necrotic and purulent material. In the midportion was a 1 by 0.6 by 0.5 cm. fecalith (fig. 2). Focal abscess areas were present throughout the wall. The entire wall of the ap-

Figure 1

pendix, the serosa, and the peritoneum were intensely inflamed. The final diagnosis was acute appendicitis with marked periappendiceal inflammation and fibrosis.

Coproliths are also known as fecaliths and enteroliths. They are composed of calcium and magnesium phosphates and carbonates mixed with organic residue.

The typical radiographic appearance of an appendiceal fecalith is a concentrically laminated ovoid opacity in the right lower quadrant. It may be single or multiple, measure from 2 to 40 mm. in diameter, and be located anywhere within a 15 cm. radius of the midpoint of the right iliac crest. Felson found that 33 per cent of 75 acutely inflamed appendiceal specimens contained radiopaque calculi as opposed to 2.7 per cent in 183 normal appendices. He estimated that visualization of calculi roentgenologically in patients with acute appendicitis is 10 times more common than in normal patients.

The direct relationship of appendiceal fecaliths to appendicitis and increased incidence of perforation and suppuration in the presence of a fecalith have been well documented. The perforation rate is from 35 per cent to 95 per cent in appendicitis associated with fecalith as compared to approximately 12 per cent in cases without fecalith.

In the patient with abdominal pain the roentgenographic demonstration of a fecalith is a highly specific sign for the diagnosis of acute appendicitis, and a warning that the risk of complications is high. Because appendicitis with a fecalith appears to be a more virulent disease, resulting more frequently in spontaneous perforation, and because the presence of a fecalith even in an asymptomatic person may well result in acute appendicitis, nearly all authors favor immediate appendectomy.

Figure 2

Marvin S. Berk, M.D.
St. Vincent's Hospital
Jacksonville
Florida Radiological Society

Your Opinion Is Needed

Read, Complete and Mail

Questionnaire on Page 70a

President's Page

Something New

Hospital Planning

The past two decades have seen unprecedented construction of hospitals and health facilities in our nation, more than in all the rest of the world combined. During that period this has been stimulated in part by the terrific growth of voluntary health insurance, workmen's compensation insurance, and government medical payments. These assured the payment for many health and hospital bills that previously had to be absorbed by the physician and the hospital.

In 1962 the House of Delegates of the American Medical Association passed a resolution urging state and county medical associations to encourage participation of physicians in voluntary hospital planning groups and in opposition to mandatory planning bodies. They were too late for some states. The San Francisco Bay area has seen an increase of 26% in acute beds, and of 120+% in nursing home beds in the past five years resulting in a situation in which there are 3,500 vacant beds on an average day in the Bay area. The hospitals are running 30 to 50% occupancy. Naturally, they are having financial difficulties which are reflected in patient charges. New York has seen similar regional and local overbuilding.

Hospitals attempted to take the lead and planning bodies were beginning to function in many areas, but they were too late to prevent the passage of compulsory state laws for hospital planning in California and New York. These established additional state bureaucracies to which all applications for hospitals and nursing homes must be submitted. California's authority is cooperative with physicians, and planning bodies appointed by the authority participate in this work. The bureaucratic Metcalf-McClosky Law in New York, on the other hand, requires six physicians on the Board, but they are appointees of the Governor without regard to the type of medicine practiced by them. There is absolutely no assurance that they speak the voice of our profession.

On November 28 and 29 the AMA held a conference on Areawide Health Facilities Planning in Miami Beach to which laymen and physicians were invited. This was a splendid conference and was well attended, but not well enough considering its national significance. It emphasized the fact that compulsory planning is passed when voluntary planning fails—because hospitals, physicians and others refused to accept the recommendations of voluntary planning groups when they exist. Physicians were too late in providing leadership.

The Florida Medical Association has urged that county medical societies participate in areawide planning groups. We are new in the field and many problems exist for us to solve. Since Florida is a rapidly growing state, many sections need additional beds, BUT proper planning is imperative if we are to meet specific needs and not bankrupt our hospitals and our patients. More planning is needed in the direction of keeping patients vertical rather than horizontal. Ambulatory units, nursing homes and rehabilitation facilities can relieve much of the need for acute beds. There is little doubt that in this day of first day, first dollar coverage for hospitalization without equal payments for outpatients there is considerable OVERUTILIZATION of acute hospital beds.

It is strongly recommended that county medical societies take the lead in establishing Areawide Health Facilities Planning groups in their localities. This will assure adequate physician representation. Unfortunately, financing will not be easily arranged if some of the 43 existing committees in the United States are examples. Possibly, medical societies should cooperate with hospitals and insurance in initial financing in order to avoid further calls on federal funds. The choice of responsible citizens for the committee is vital since it is through education of these citizens that community education and funds will be realized. The time is late. If we are to avoid more laws and controls, *we must accept our responsibilities locally* now.

Happy New Year

Remember
Presidents and Secretaries Conference
Orlando, January 23-24, 1965

Sam Day

Editorials

The Mental Health Program

I believe that the time has long since passed for daring to make a new and bold approach to the entire problem of Mental Health. If you object to thinking a decade to a quarter of a century ahead of your generation, you need read no further.

If psychiatry could do what it thinks it can do, it would still be too late for me. Most of you should not smile for you, too, are over the hill in so far as adequate and early Mental Health direction is concerned. I should have had help the first 10 years—not the last 20. To be sure, such timing of the psychotherapy will help my children, but it is simply a case of too little and too late for my generation.

"Today we probably are teaching doctors to be the finest scientific doctors the world has ever seen. Some of the basic psychological facts, however, should be taught medical students so that they will know to approach people in a friendly, amiable, understanding manner. . . ." said H. Gordon MacLean, M.D., Past President, California Medical Association. In the opinion of Harlan English, M.D., "The medical educational system, as it is geared today, is turning out graduates untutored in the art of medicine and totally ignorant of the social and economic structure in which they must serve. . . ."

We have excellent medical schools—unquestionably the world's best, but how they resist change. Further, we have the finest psychiatrists ever, but they spend too much time on too few patients, often not the patients in greatest need nor those who would benefit most. It is not necessarily their fault that they do so. The present day method of mental patient selection is wrong and our medical schools need a change in the area of their psychiatric curriculum. Today's program in student training accomplishes little more than scaring the life out of the student. He is too often thoroughly convinced that, as a physician, with one year internship, he can do little or nothing in the field of mental health, and he must refer—and the patient must wait—often two to six weeks.

The psychiatrists select the patients to be treated. It should be the other way around, provided the surgeon, the obstetrician, the ophthalmologist and the pediatrician get the proper medical school and postgraduate training. They should refer those patients who need the higher level psychiatric treatment.

Medical schools can double the number of hours that are being given students in psychiatric training. This change should be made now and it can be accomplished without weakening the other disciplines. It is beyond the purview of this discussion to outline a four year course in medicine. Suffice it to say that embryology, histology, bacteriology, library science and some other courses could be easily handled in the third and fourth years of premedical training. Courses in medical school aimed at helping the young physician handle the mentally disturbed could be substituted either as elective or as required subjects.

Florida is fortunate to have two medical schools that are truly leaders in the field of psychiatric training. The records of their students attest to this fact. They, however, still do not have nearly enough hours in this field.

I have studied the curriculums of 10 medical schools during recent weeks. The University of Florida is apparently giving more hours in this field than any of the 10 studied. The student there receives 190 hours plus nine weeks on the Psychiatric Inpatient Unit and the Outpatient Clinics. There is also a 12 week elective course for the seniors, making a total of approximately 800 hours, truly an outstanding number comparatively. Interns, whether in surgery, obstetrics, dermatology or other specialty, who serve in a medical school hospital, receive training far beyond that received by those who so serve in a nonteaching or nonmedical school hospital.

None of us expect nor do we desire that every physician become a psychiatrist. Nevertheless, I believe most of us think that all physicians should understand, at least be aware of, the psychic components in somatic illnesses. They

should handle and refer such patients as the non-surgeon refers a patient with acute appendicitis, and they should have self confidence while doing so.

Recently the Journal of the American Medical Association carried a report on the Mental Retardation meeting at which Dr. Leo M. Henikoff stated in essence that the physician is handicapped in dealing with mental problems because of his lack of formal training in dealing with such problems. We know what the trouble is. Why do we not do something about it?

In Florida, we believe that we have made a modest beginning. Psychiatric seminars are available to all physicians—and in their practicing area. The Florida Medical Association, the Florida Academy of General Practice and the Florida Psychiatric groups sponsor, the University of Florida directs, and the pharmaceutical houses foot the bills for this postgraduate training. A two day lecture session is followed by 40 hours (covering a 10 to 12 week period) preceptorship under a psychiatrist of his choice. The practical, informal approach is used and the physician may present his own patients for study and advice.

For those who have already finished this 56 hour course, a second and more advanced course is being planned. Such opportunities for further study will become more popular as the schools increase their formal classroom instruction. If we plan to treat mental patients in Community Mental Health Centers, it is imperative that we have trained personnel there to meet both their mental and medical needs.

As of now, many of our medical schools seem to be pointed principally to the three year residency in psychiatry as approved by the American Board of Psychiatry and Neurology and by the American Medical Association. This plan is fine and I am for it, but I would strongly recommend that each physician so trained be required to spend at least three months in a rural community before becoming a board-certified psychiatrist. Further, I would suggest that his three month absence be covered by an interested practicing physician, and that he be paid by the government. How? Take the money from the moon shot or some other such project. It will never be missed. Such expenditures would be drops in the bucket compared to the three billion now being spent annually on mental illness and mental retardation.

Every small improvement that assists in early treatment lowers the cost. Even the modest effort in this field has already eliminated the necessity for two billion dollars of planned hospital construction costs during the past decade—to say nothing of the relief of suffering and the happiness brought to many people.

As for those who do not or will not agree with this approach, let them present something better. There is little to be gained in the spending of billions of dollars in the building of hospitals and community mental health centers unless we can produce the personnel to man them.

J. Basil Hall, M.D.
Tavares

Up From Apathy by a paranoic nut

In 1961, the newly inaugurated President of the United States stated in his inaugural address, "I do not know whether a nation conceived such as ours, can survive.☆ Doctors shrugged their shoulders and continued to administer to the sick, leaving the affairs of government to those who had been duly elected by the people. But physicians were not long in their complacency, for scarcely had the New Frontier moved into the White House when the administration in Washington launched its attack upon the free and competitive private enterprise system in this country. Unscrupulous politicians had learned that the most effective way to change the foundations of our economic system was to enslave doctors of medicine, prime examples of individual initiative, ambition and achievement—the antithesis of the socialist schemers. Hence, physicians of America were singled out for the primary assault; thus, the King-Anderson bill, conceived by an expert on socialist legislation, was launched. non sense!

From the beginning, sincere Congressmen recognized this medical tax bill as a clever scheme to garner, by deception, the votes of 17 million elderly citizens, rob young families of their essential earnings, and place hospitals and physicians under merciless political domination.

Communist literature applauded the King-Anderson bill and denounced doctors as blackmailers and money-mongers. Local opportunist politicians in Broward County flashed their toothy New Frontier grins, and climbed on the band wagon displaying fraudulent Medicare labels and hatred propaganda against the oppressed and embattled physicians. It was clearly apparent that a

☆ He said nothing of the sort. This could be the silliest thing I've ever read.

well organized campaign to discredit physicians and render them defenseless before their patients was in full bloom in Broward County.

Doctors observed these developments with growing apprehension and alarm. Physicians could no longer be apathetic. Dr. Lynn* published the "Medical Newsgram," a monthly newsletter describing the fallacies of King-Anderson medicine and other socialist doctrines. Community leaders, in response to the "Medical Newsgram," indicated they would support their beleagured physicians.

At an emergency meeting, Broward County doctors decided to undertake new responsibilities in providing programs on medical legislation, for the education of the public. The Committee for Medical Care was formed and organized as follows:

A Chairman conducted all meetings and served as liaison to a public relations consultant. The Planning Board consisted of the chairman of each subcommittee. Its function was to determine major policy and approve plans for action. The Speakers Subcommittee of doctors and other citizens was selected to fulfill requests of local organizations for speakers on medical care legislation. A Materials Subcommittee provided all the necessary factual documents for speakers, and other subcommittees. Complete files were maintained on legislative matters. The Information Services Subcommittee accumulated material for "Letters to the Editor" columns. As a public service, newspaper and radio editors were provided with copy for broadcasts. The Liaison Subcommittee assisted in placing speakers on the programs of local social, political, medical, and religious organizations. The Special Events Subcommittee cosponsored special programs with other local activities. The Americanism Subcommittee assembled data concerning the marked superiority of the American system of private enterprise over socialist schemes represented by the King-Anderson tax bill. This committee encouraged professional and business people to support their doctors to avoid the expansion of government control into their business establishments.

In the succeeding five months, doctors and other local citizens spoke before more than 8,000 citizens and 90 organizations.

Dr. Fontaine still chuckles when he recalls his speech before a political club. An elderly couple were seated at a table in front of the rostrum. When Dr. Fontaine stated that citizens not covered by social security were left out in the cold, the wife promptly poked her husband in the side. He grimaced. As the doctor explained the high cost of inadequate social security medicine to be paid by their children and grandchildren, the elderly lady fairly bristled. She kicked her husband with such force that his cigar fell into a cup of coffee which splattered over his face and shirt. At least one politician had learned he should consult his wife before selling out the security of his family for party favor.

At a meeting of a civic organization, Dr. Bohlen was told by a trial attorney in the audience that doctors made "oodles" of money. The doctor acknowledged that many hard-working doctors did have above-average middle-class incomes. He then turned to the young attorney and asked him if he could defend the King-Anderson tax bill on the basis of the tax on the young family man, the range and quality of medical care, or in any other way. The attorney failed to reply, for he realized that his effort to encourage audience antipathy toward physicians had been exposed.

Leaders of political senior citizens groups refused to allow our speakers to address their membership. Other senior citizen groups, however, welcomed our speakers. One senior citizen stated at such a gathering that he preferred the social security approach to medical care because he had never failed to receive his social security check. Dr. Robbins replied he would like to see him receive his check regularly; and then he reminded the audience that the social security system was millions of dollars in debt and that the additional burden of over two billion dollars for medical care might stop this man's checks in the event of a depression. The somber realization by the audience that someone pays for every handout brought loud applause, indicating agreement with the speaker.

The Special Events Subcommittee provided programs to inform doctors' office assistants about the pitfalls of medicare. Also, this committee arranged a National Telethon broadcast in which directors of the Kerr-Mills programs in other states spoke, via telephone and a transmitting loud-speaker, to a large audience in a Fort Lauderdale auditorium. This event was broadcast by radio into Broward County homes. From the moment the program went on the air, it was felt that the opposition was at work. The moderator of the program announced that two speakers from out-of-state had requested, at the last moment, to be excused because of illness. An elderly man

* The names of physicians are fictitious.

in the audience remarked, "The boys from Harvard must be working overtime tonight." The audience reacted good-naturedly. At that moment, there was a loud rumble from the floor above the auditorium, and the moderator chimed in, "Sounds like thunder on the left." The audience listened attentively, for they sensed the struggle between opposing forces as the moderator tried desperately to launch the program. Finally, he succeeded in telephoning three state health directors, who agreed to answer questions about the Kerr-Mills Law. The audience learned that the Kerr-Mills Law for senior citizens was successful but needed a few improvements.

The Materials Subcommittee supplied numerous reprints for distribution in doctors' offices. Favored reprints were: "What Price Medical Care for the Aged" (Readers Digest, June 1962), "Playing Politics With the Aged" (Wall Street Journal, April 2, 1962), "Social Security Medicare Will Be the Straw That Breaks Taxpayers' Backs" (The Fort Lauderdale News, March 29, 1962), "Your Future Is at Stake" (fig. 1), and "Write Your Congressmen" leaflets. A rubber stamp with the inscription "MEDICAL CARE FOR THE AGED—YES; KING-ANDERSON TAX BILL—NO" was used on stationery, magazine covers, bank checks, and bumper strips.

Local newspapers quickly responded to the doctors' efforts. Newspaper headlines read: "Senior Citizens Misinformed, Doctors Say," "MDs Fight Socialism," "Medicare Forums Planned," "Administration Shows Kind of Pressure It Employs to Get What it Wants," "A Big Injection of Politics Won't Cure Ills of Elderly," "Unfair to Stigmatize Doctors Because They Execute Their Rights," "Seniors Should Rally, Backing Kerr-Mills Plan," "Medicare Seen as Phony Issue," "Medicare for the Needy, Not the Greedy."

The Information Services Subcommittee published "Which Would You Choose" cartoons, which diagramed the advantages of the Kerr-Mills Law and the serious shortcomings of the King-Anderson Tax Bill. An essay contest, "The Case Against Compulsory Medicine," proved very popular. Contestants were requested to answer the question, "Why would a compulsory medical program, supported by the taxation of all wage earners, and controlled by the Federal Government, fall short of America's medical standards and be dangerous to the principles by which this nation was founded?" The prize was a share of U. S. Steel stock, donated by a local citizen.

YOUR FUTURE IS AT STAKE!

IF the controversial KING-ANDERSON TAX BILL is passed to provide "medical care" for the aged . . .

1. ALL WAGE EARNERS in America will be forced to pay a compulsory 17% tax increase for a program that will be limited and *faulty*. Under the King Anderson Bill, senior citizens will STILL have to pay $10 a day for the first 9 days they are hospitalized, and, for initial diagnostic tests they could pay $20 . . . a total of *$110.*

2. ONLY SENIOR CITIZENS who are under social security will be included. Some 4 to 5 million who are not, will be left out in the cold . . . and they need it the most!

3. EVEN WORSE, the program will be based on AGE alone, rather than *need.* Money from the compulsory tax will be used to give care to those who *can* afford it as well as those who cannot . . .

Your doctor supports the KERR MILLS LAW, which was passed last year and is already working in many states. This law provides for a federal grant to individual states—making medical help available to ALL over 65 who *need* it . . . and, *senior citizens do not have to be "impoverished"* to qualify! In determining their eligibility for assistance, an income *is* allowable . . . even more than under the King Anderson Bill.

REMEMBER THIS . . . Once a compulsory tax is established, it will never be *removed.* And you, yourself, must guarantee payment of this tax with your home, your savings or any other assets, REGARDLESS of personal circumstances. *IF* the King-Anderson Bill is passed, all wage earners in America will be saddled with this compulsory tax for their working lifetimes, all for the sake of a costly, yet *inadequate* medical care bill:

You can help *prevent* this . . . Write your congressman and ask him to VOTE NO to the King Anderson Tax Bill . . . *today.*

Thank you . . . Your Doctor

Figure 1

As the U. S. Senate vote on the King-Anderson Tax Bill drew near, the Liaison Subcommittee commenced OPERATION LEARN, a telephone information service. The newspaper advertisement describing the operation read, "Please pick up your phone and dial JA LEARN. We want to clear up any questions on medical care legislation."

Five days before the Senate vote, the opposition was invited to join a medical doctor and an attorney in answering telephone questions from a radio audience. The previously vocal King-Anderson advocates failed to appear. They could not face an informed public. The program continued without them. Many listeners telephoned their appreciation for the information programs the doctors had sponsored.

The following day, a newspaper article confirmed that membership in political senior citizen organizations had diminished from 5,000 to scarcely 100 members. Their New Frontier spokesmen had disappeared from the scene. King-Anderson tax legislation was dead as far as Broward County was concerned.

Months later, the Florida State Legislature passed the Kerr-Mills Medical Aid to the Indigent

Law. The skirmish was temporarily over, but even so, 1961 was not the year for the elderly. It was a year for politics in which our respected and cherished senior citizens were misled and abused by the most heinous of political schemers. It was a year for blarney, and it remains to be seen whether oil will take its place as a new camouflage to beguile people into thinking a revitalized, all wise, all powerful centralized government can solve the problems of the elderly with empty-handed promises in exchange for votes.

Broward County doctors, as a result of their experiences, are convinced that 220,000 alerted physicians, treating one million patients a day, in all the cities, villages and hamlets in the United States, could be instrumental in protecting a superior American economic system and in preserving personal freedom for all people.

It is their hope that this précis will stimulate doctors in other communities to seek, and receive, community support in a continuing struggle against political control of medicine, other professions, and businesses.

Tobias R. Funt, M.D.
Chairman, Committee for Medical Care, 1961-1963
Fort Lauderdale

Seventy Per Cent of Florida Physicians Are Nonsmokers

The Florida Committee on Smoking and Health requested the Florida State Board of Health to plan and conduct a survey to determine the smoking habits of Florida physicians. The Florida Committee is composed of the following agencies: The Florida Medical Association, the Florida State Board of Health, the State Department of Education, the American Cancer Society, Florida Division, the Florida Heart Association and the Florida Tuberculosis and Respiratory Disease Association.

Accordingly, a letter explaining the survey and enclosing a postal card questionnaire was mailed on April 22, 1964 to 5,864 Florida physicians. Response from the physicians was excellent and prompt. Thirty-four hundred and sixty-seven or 60 per cent of the physicians returned the questionnaire. Not included in the tabulations are 166 additional responses received after the cutoff date when the data study was completed. Perusal of these late replies indicates that they do not differ from those tabulated.

The questionnaire postal card was simply designed to encourage maximum participation and to supply the following information: Specialty, age, county, smoking habits, average daily consumption of cigarettes by the smokers, if stopped how long and why, opinion as to health hazard of smoking, the effects of the Public Health Service Report on Smoking and what advice the doctor gives to patients about the smoking of cigarettes.

Careful study of the various specialty groups by age and per cent distribution indicates that the distribution of the respondents was not significantly different from the physician population of the state by age and specialty.

No attempt has been made to study the nonrespondents, as the physicians were not asked to sign the cards. Nor was there any attempt made to apply intricate statistical methods to the data.

Status of Cigarette Smoking.—Among the 3,467 physicians who responded to the questionnaire 25 per cent never smoked, 45 per cent smoked but have now quit smoking, and 30 per cent are now smoking. In table 1 physicians are distributed according to specific practice. It is noted that the pathologists have the lowest (18.5) per cent of smokers in contrast to the urologists who report that 40 per cent still smoke cigarettes. The nonsmokers for the total group, those who have quit and those who have never smoked, are 70 per cent.

Cigarette Smoking a Health Hazard.—Ninety-seven per cent of the physicians reported that they believed smoking to be a health hazard. Three per cent stated that they did not believe smoking to be a health hazard. One of the respondents, while not answering the specific question, "Do you believe smoking to be a health hazard?", did comment as follows, "Certainly much less than drinking. Depends on the amount smoked. Dieting, auto speeding, flying, etc., etc., are health hazards. You've got to die of something!"

Consumption of Cigarettes Among Physician Smokers.—The data indicate that 25 per cent smoked less than one pack a day, 35 per

Table 1. — Current Status of Cigarette Smoking Among Physicians, By Medical Specialty, Florida, 1964

Medical Specialty	Replies Received	Percentage Now Smoking	Quit Smoking	Never Smoked
Total All	3,467	29.9	45.1	25.0
General Practice	851	37.0	39.0	24.0
Internal Medicine	594	26.5	50.9	22.6
Surgery	469	25.1	48.2	26.7
Obstetrics-Gynecology	255	37.0	36.6	26.4
Pediatrics	213	25.0	43.4	31.6
Eye, Ear, Nose, Throat	206	27.1	45.1	27.8
Psychiatry-Neurology	160	37.0	44.1	18.9
Radiology	124	21.1	54.9	24.0
Orthopedics	115	29.1	50.1	20.8
Urology	86	40.0	37.4	22.6
Anesthesiology	84	27.0	47.6	25.4
Pathology	84	18.5	45.8	35.7
Dermatology	60	19.6	56.8	23.6
Miscellaneous*	166	23.0	53.9	23.1

* Miscellaneous includes Industrial Medicine, Physical Medicine, Public Health and unspecified.

cent one pack or more and 40 per cent two packs or more per day.

How Long Stopped.—Of the 1,485 physicians who have stopped smoking, 17.2 per cent have quit for less than a year, 27.3 per cent have quit for from one to five years and 55.3 per cent have quit for more than six years.

Reasons for Quitting Smoking.—The reasons for quitting smoking were classified into several groups: (1) Health reasons, (2) Scientific evidence, (3) Lack of satisfaction, (4) Self discipline, (5) Whim and (6) Other. Forty-three per cent gave their reason for stopping smoking as health reasons—cough, throat trouble, bronchitis, angina, bronchiectasis, and others.

The next largest group (27.9 per cent) was that involving scientific evidence that cigarette smoking was harmful to health. The most common answer given was "fear of lung cancer." One physician answered the question as to "Why did you quit" with the reply, "Just for the hell of it."

Effect of the U. S. Public Health Service Report.—Eighty-six per cent of the respondents reported that the Surgeon General's report on Smoking and Health had not affected their smoking habits. Of this number, however, a large per cent of the respondents had quit smoking or had never smoked. Fourteen per cent said that the report had an effect.

Advising the Patient on Smoking.—It was a surprise to learn that 50 per cent of the physicians advised all patients to stop smoking, that 45 per cent advised those patients with specific conditions to stop, and that almost 5 per cent never advised anyone to stop. Among the internists less than one per cent of the group never advised their patients to stop smoking, while about 22 per cent of the psychiatrists and neurologists never advised patients to stop smoking.

A study of physicians by age revealed there was no significant difference as to what they advised patients about the question of smoking cigarettes.

Summary.—This is a report of the results of a survey of the smoking habits of 60 per cent of the Florida physicians. Ninety-seven per cent of the Florida physicians responding to the survey believe the smoking of cigarettes to be a health hazard. They advise no smoking to all or patients with specific conditions 95 per cent of the time.

In conclusion, it is evident from this study that the physicians of Florida are assuming personal responsibility for public education about tobacco and health by instruction and example.

We wish to acknowledge the assistance of the Florida State Board of Health and the Florida Tuberculosis and Respiratory Disease Association in making this survey possible. Especially do we wish to express our appreciation to Mr. Albert J. Klimaszewski, Florida State Board of Health, for his valuable help.

Stopping smoking is
The easiest thing in the World—
I've done it hundreds of times.
Mark Twain

Charles I. Tate, M.D.,
Associate Professor of Medicine
University of Miami School of Medicine
and Chairman, Florida Committee
on Smoking and Health

J. E. Fulghum, M.D.,
Director Division of Chronic Diseases,
Florida State Board of Health
and Secretary, Florida Committee
on Smoking and Health

News

The Annual Seminar of the Watson Clinic will be held on March 6, 1965, in Lakeland. Speakers include Drs. John H. Moe; O. H. Pearson; C. Walton Lillehei; Tinsley R. Harrison; and J. Lawton Smith.

Dr. Edwin H. Updike of Ocala has been selected as president of the Florida Division of the American Cancer Society.

Dr. Wilson T. Sowder of Jacksonville, State Health Officer, has been awarded the Distinguished Service Award of the American Association of Public Health Physicians.

The Sixth Annual Fall Meeting of the Florida State Surgical Division of the International College of Surgeons was held Friday and Saturday, November 27-28, in Gainesville at the University of Florida College of Medicine. Guest lecturer was Dr. George C. Morris Jr. of Houston, Texas, Director of Surgical Research Laboratory and Assistant Professor of Surgery at Baylor University College of Medicine.

The Jacksonville Hospitals Educational Program will have two postgraduate sessions the first part of 1965. On January 9, there will be a Seminar on Infectious Diseases and on February 13 a Seminar on Surgery of the Hand. Each begins at 9:00 a.m. and is being held in the auditorium of the Duval Medical Center.

Dr. Robert L. Williams of Gainesville has been appointed as Chairman of the Department of Psychiatry at the University of Florida College of Medicine succeeding Dr. Peter F. Regan who resigned to become Vice President of the State University of New York at Buffalo. Dr. Williams has been acting Chairman since June.

The Seventh Annual Cardiovascular Seminar sponsored by the Suncoast Heart Association and the Hillsborough County Heart Association has been scheduled for January 30-31 at Port-O-Call, Tierra Verde, St. Petersburg. Program co-chairmen are Dr. Frank LaCamera Jr. of St. Petersburg and Dr. Henry J. L. Marriott of Tampa.

Two seminars have been scheduled by the University of Florida College of Medicine Division of Postgraduate Education in Gainesville for January, 1965. On January 14-16, there will be a Seminar in Gastroenterology, and on January 21-23 a Seminar in Pediatrics entitled "Current Concepts in Allergy and Clinical Immunology in Childhood."

The fall meeting of the Florida Radiological Society was held late in October at Daytona Beach. The program consisted of a film seminar conducted by Dr. Herbert D. Kerman. Panelists were Drs. George P. Daurelle Jr., Ralph C. Aye, Donald B. Altman and Marvin S. Berk. In the afternoon Dr. Joseph K. Isley Jr. discussed "Percutaneous Cholangiography" and Dr. Clyde Williams, Department of Radiology, University of Florida College of Medicine, the use of laboratory procedures with special reference to free thyroxin in the diagnosis of thyroid disease. Presiding officer was Dr. Marvin McClow.

The North Florida Pathologists Association will hold its regular meeting at 8:00 p.m., Thursday, January 21, in the auditorium of Baptist Memorial Hospital at Jacksonville. The program will be a slide seminar moderated by Dr. Alvan G. Foraker.

The annual series of seminars entitled "Psychiatry in Medical Practice" will begin February 10 at 8:00 p.m. at Jackson Memorial Hospital in Miami sponsored by the Department of Psychiatry of the University of Miami School of Medicine. The seminars will continue each Wednesday evening at the same time.

The Regional Meeting of the American College of Cardiology is being held at the University of Florida College of Medicine in Gainesville January 28-30.

The next lecture in the anesthesiology evening series, sponsored by the Department of Anesthesiology of the University of Miami School of Medicine at Jackson Memorial Hospital in Miami, will be held on January 26. Following will be sessions on February 22, March 22 and May 10. The time is 8:00 p.m.

Association News

SEVENTH ANNUAL CONFERENCE

COUNTY MEDICAL SOCIETY PRESIDENTS AND SECRETARIES

Sponsored by the Florida Medical Association, Inc.

January 23-24, 1965

Robert Meyer Motor Inn

Orlando, Florida

SATURDAY AFTERNOON, JANUARY 23, 1965

Presiding, Samuel M. Day, M.D., President

1:00 p.m. Registration

1:15 p.m. Remarks of President—Dr. Day

1:30 p.m. Highlights—National Medical Scene and AMA Programs—F. J. L. Blasingame, M.D.

2:00 p.m. Medical Services Panel, Irving E. Hall Jr., M.D., Moderator, Chairman, Council on Medical Services

- Current Programs—Indigent Medical Care—HSI, PAR, MAA—Nelson Zivitz, M.D., Chairman, Committee on Indigent Care
- Home Care Programs—VNA, Homemaker Services—William R. Daniel, M.D., Chairman, Committee on Aging
- Improvements Needed—Outpatient and Clinic Care—Simon D. Doff, M.D., Assistant State Health Officer and Director, Bureau of Special Health Services, Florida State Board of Health
- Maternal Health—James M. Ingram, M.D., Chairman, Committee on Maternal Health
- Questions and Answers

3:00 p.m. Coffee Break

3:15 p.m. Medical Economics Panel, Jack A. MaCris, M.D., Moderator, Chairman, Council on Medical Economics

- Relative Value Studies, Blue Shield, Workmen's Compensation, Medicare, Vocational Rehabilitation, etc.—Henry J. Babers Jr., M.D., Chairman, Committee on Fee Schedules
- Insurance Review Committees and Utilization Committees, David J. Lehman Jr., M.D., Chairman, Committee on Health Insurance
- Area-wide Hospital Planning—L. Washington Dowlen, M.D., Chairman, Committee on Hospitals
- Questions and Answers

4:00 p.m. Medical Legislation

- National Legislation—Joseph C. Von Thron, M.D., Chairman, Council on Legislation and Public Agencies
- State Legislative Program—George S. Palmer, M.D., Chairman, Committee on State Legislation
- Questions and Answers

4:40 p.m. FMA Sponsored Programs

- FMA Investment Plan—Floyd K. Hurt, M.D., Chairman, FMA Investment Plan Committee
- FMA Insurance Programs—H. Lawrence Smith, M.D., Chairman, Committee on Members Insurance
- Questions and Answers

6:30 p.m. Social Hour

7:30 p.m. Buffet Dinner

SUNDAY MORNING, JANUARY 24, 1965

Presiding, H. Phillip Hampton, M.D., President-Elect

9:00 a.m. Voluntary Health Agencies—Mason Romaine III, M.D., Chairman, Council on Voluntary Health Agencies

Medicine and Religion, Committee on Medicine and Religion

9:30 a.m. Problems of County Medical Societies

Large—Dade County Medical Association, Richard M. Fleming, M.D., President

Medium—Escambia County Medical Society, Earl G. Wolf, M.D., President

Small—Lake County Medical Society—Argin A. Boggus Jr., M.D., President

10:15 a.m. Coffee and Coke Break

10:30 a.m. Open Discussion of County and State Programs

Audience Participation

12:00 Noon Adjournment of Conference

Report of Delegates American Medical Association 1964 Clinical Meeting

The Eighteenth Clinical Convention of the American Medical Association convened in Miami Beach on November 29 and continued through December 2, 1964. The final registration reached a total of 9,356, including 4,118 physicians. Tribute was paid to the late Dr. Norman A. Welch, AMA President who died last September. He was succeeded in office by Dr. Donovan F. Ward of Dubuque, Iowa. Dr. James Z. Appel of Lancaster, Pa., vice chairman of the AMA Board of Trustees, was named President-Elect and will become President in June 1965.

Health care for the aging, a new teletype communications system for the medical profession, a statement on human reproduction and recommendations from the Commission on the Cost of Medical Care were among the major subjects acted upon by the House of Delegates. On the issue of health care for the aging the House gave strong endorsement to the address of President Ward in which he declared: "We have no choice except to stand firm in our efforts to prevent the standards of health care in this country from being undermined by a radical departure from the unique American way which has accomplished so much for mankind." He reaffirmed the Association's opposition to the King-Anderson type of legislation and called for renewed, intensive effort to prevent the passage of such legislation.

To implement this course, the House gave unequivocal approval to a suggestion from the Board of Trustees that an expanded educational program be conducted in the next few months. The Board pointed out that "a variety of techniques and media must be utilized if the public, the Congress and special audiences are to be reached effectively." No action was taken on three resolutions which would have altered the Association's position on health care legislation. Instead, the House urged "component associations to stimulate the state and local governments to seek the fullest possible implementation of existing mechanisms, including the voluntary health insurance principle, to the end that everyone in need, regardless of age, is assured that necessary health care will be available."

The establishment of a tele-typewriter communications service between the Association and the state medical societies was approved and should be operative no later than July 1965. While participation is optional, the House urged each society to take advantage of this rapid communications system.

The House updated its policies on population control to conform to changes in society and medicine and to take a more positive position on the important medical-socio-economic problem of human reproduction. The four point statement adopted related to intelligent recognition of the problem not only as a matter of responsible parenthood but also as a matter of responsible medical practice; acceptance by the medical professon of a major responsibility in matters pertaining to human reproduction as they affect the total population and the individual family; providing counsel and guidance when the needs of patients require such aid; and AMA responsibility "for disseminating information to physicians on all phases of human reproduction, including sexual behavior, by whatever means are appropriate."

With modifications suggested by the Board of Trustees, 33 recommendations from the Commisson on the Cost of Medical Care were approved by the House. They cover four sections—Research, Hospitals, Physicians and Miscellaneous. A substantial number of the studies recommended by the Commission are already under way and others are in process of being implemented.

The House agreed that the Association should cooperate with the U. S. Public Health Service in eradicating the Aedes aegypti mosquito from the American hemisphere, that a section on Space Medicine should not be created now and that there should not be an increase in AMA dues at this time. Among other actions, the House emphasized its continuing awareness of the demand for action on satisfying the need for increasing numbers of family physicians; urged all state and component medical associations to approve, where feasible, the inclusion of a voluntary, nondeductible contribution to independent political action committees on the society's annual dues billing statement; and reaffirmed its approval and support of the National Council for Accreditation of Nursing Homes. It also urged strong support of the Woman's Auxiliary and asked the state and county medical societies to give serious consideration to the idea of joint husband-wife membership.

The American Medical Association Education and Research Foundation reported to the House that one out of every six medical students, interns and residents in the United States is now receiving financial assistance from the Foundation's loan fund. The 1967 Clinical Convention will be held in Houston, Texas.

Respectfully submitted.
Jere W. Annis, M.D.
Burns A. Dobbins Jr., M.D.
Francis T. Holland, M.D.
Meredith Mallory, M.D.
Reuben B. Chrisman Jr., M.D., Chairman

Deaths

Bible, Charles John, Miami; born in Chattanooga, Tenn., on June 7, 1884; Emory University School of Medicine, 1914; interned at Grady Memorial Hospital, Atlanta; engaged in the general practice of medicine in Atlanta for 17 years and in Miami for 32 years; held membership in the American Medical Association and the Southern Medical Association; died June 9, aged 80.

Bieker, Arthur Joseph, St. Petersburg; born in Hammond, Ind., on July 2, 1906; Emory University School of Medicine, Atlanta, Ga., 1933; served an internship at the Tampa Municipal Hospital, Tampa, and a residency at the United States Marine Hospital, Norfolk, Va.; entered the general practice of medicine in St. Petersburg in 1936, and continued to practice there for 18 years before his retirement in 1954; was president of the Pinellas County Medical Society in 1944 and represented that society in the House of Delegates of the Florida Medical Association; was a member of the American Medical Association, American Academy of General Practice and Aerospace Medical Association, died June 27, aged 57.

Burgh, Lois Cleone, Orlando; born in Roslyn, Wash., on Feb. 12, 1916; Licentiate of the Royal College of Physicians of Edinburgh, 1942; interned at Queen Mary's Hospital, England, in 1943 and served residencies at the Newcastle General Hospital, Newcastle-on-Tyne, England, in 1943-1944 and at Prince George Hospital, Chererly, Md., in 1946-1947; was a member of Sir John Frasey's A.R.P. Staff in 1939; was licensed in Florida in 1952; engaged in the general practice of medicine in Orlando; became a member of the Florida Medical Association in 1960 and also held membership in the American Medical Association; died April 10, aged 48.

Carter, Edward Fenton, Sr., Tampa, born in Magnetic Springs, Ohio, in 1884; Atlanta School of Medicine, Atlanta, Ga., in 1907; engaged in the general practice of medicine and physical therapy in Mulberry from 1908 to 1920 and in Tampa from 1920 to 1959 when illness forced his retirement; during World War I was chief medical officer of the Polk County Home Guard; held membership in the American Medical Association and the Southern Medical Association; died August 13, aged 79.

Dean, Russell Hardy, Jacksonville; born in Leesburg in 1889, the son of Dr. Russell H. Dean Sr., a pioneer physician in the Jacksonville area; University of Maryland School of Medicine, 1912; had engaged in the general practice of medicine in Jacksonville since 1912; held membership in the American Medical Association, Southern Medical Association and the American Academy of General Practice; died April 21, aged 74.

Gill, Richard Spencer, West Palm Beach; born in Petersburg, Va., Dec. 18, 1897; University of Virginia School of Medicine, 1924; served an internship at the University of Virginia Hospital; was a veteran of two wars, serving as an infantry volunteer in World War I and as a major in the Army Medical Corps in World War II; had engaged in the practice of internal medicine in West Palm Beach since 1925; held membership in the American Medical Association and the American Geriatric Society; died Oct. 20, 1964, aged 66.

Gross, Herbert Frederick, Coral Gables; born in New York City on July 12, 1905; New York University College of Medicine, 1930; served internships at Queensboro and Lincoln hospitals and a residency at New York Cancer Institute, all in New York City; was a veteran of World War II, serving with the rank of major in the Army Medical Corps; engaged in the general practice of medicine and allergy from 1943 to 1949 in Bayshore, N. Y. and from 1949 to 1957 in Levittown, N. Y.; entered practice in Miami in 1957; was clinical instructor in allergy, University of Miami School of Medicine; held membership in the American Medical Association and the American College of Allergists; died June 26, aged 59.

Head, Thomas Duncan, Crawfordsville; born on Feb. 16, 1921; Medical College of Alabama, Birmingham, 1950; interned at the National Naval Medical Center, Bethesda, Md., 1950-1951; served a residency at the Alachua County Health Department, Gainesville, 1952; postgraduate study one year each in medicine, pediatrics and obstetrics-gynecology in Naval hospitals in Jacksonville, Fla., Bethesda, Md., and Key West, Fla., 1952-1954; served 73 months active duty, United States Navy in World War II and Korean War; engaged in the general practice of medicine in Crawfordsville since 1954; held membership in the American Medical Association; met accidental death on June 1, aged 42.

Henson, Graham Edward, Jacksonville; born at Henley-on-Thames, England, in 1874; Wayne State University College of Medicine, Detroit, Mich., 1900; veteran of World War I, serving as chief medical officer at Camp Johnson near Jacksonville and Camp Greenleaf in Tennessee; later served as a medical officer for the Veterans Administration; engaged in the general practice of medicine in St. Clair, Mich., for six years and at Crescent City, Fla. for five years, before locating in Jacksonville in 1912, where he practiced for 50 years before retiring in 1962; in later years limited his practice to allergy; served the Florida Medical Association at one time as third vice president, first vice president and secretary; held membership in the American Medical Association and the Southern Medical Association; died July 2 after an extended illness, aged 90.

Hughes, Lawrence Merrill, New Smyrna Beach; born in Brooklyn, Ind., in 1901; Indiana University School of Medicine, Indianapolis, 1931; was at one time anatomy instructor at his alma mater; served as medical director of the Martinsville Sanitorium, Martinsville, Ind., for some years; engaged in the general practice of medicine in Paragon, Ind., for 15 years before locating in New Smyrna Beach in 1950, where he engaged in the practice of urology and general medicine; held membership in the American Medical Association; died July 19, aged 63.

Liddy, Frank James, St. Petersburg; born in Canada in 1896; University of Toronto Faculty of Medicine, Toronto, Canada, 1924; came to Florida in 1948 from New Jersey; had practiced in St. Petersburg for the last eight years, specializing in psychiatry and neurology; was a member of the American Medical Association and the American Psychiatric Association; died July 9, aged 68.

Langer, Edward Maurice, Sarasota; born in New Haven, Conn., Nov. 16, 1911; Edinburgh University School of Medicine, 1937; interned at Guys Hospital, London; served residencies in internal medicine at Norwich Hospital, 1938-1939; Peter Bent Brigham Hospital, Boston, 1939-1940, and Harvard Medical School, 1942 and 1946; served in the United States Army with the rank of first lieutenant during World War II; had engaged in the practice of internal medicine and cardiology in Sarasota since 1950; held membership in the American Medical Association, American Heart Association, American Diabetes Association and Society of Internal Medicine; died Sept. 27, 1964, following a spontaneous subarachnoid hemorrhage, aged 52.

Levenson, Arthur I., Miami Beach; born in the Ukraine, Russia, June 8, 1904; Temple University School of Medicine, Philadelphia, 1931; interned in Newark Beth Israel Hospital; engaged in the general practice of medicine in Philadelphia from 1933 to 1960 and in Miami Beach from 1960 to 1964; held membership in the American Medical Association, American Academy of General Practice and Winkelman Neurological Society of Temple University; died Sept. 11, 1964 following a coronary thrombosis, aged 60.

McCain, George Holmes, Tallahassee; born in Baldwyn, Miss., April 28, 1910; University of Tennessee College of Medicine, Memphis, 1936; served an internship at St. Anthony's Hospital, Denver, Colo., and residencies in chest diseases and internal medicine at the American Legion Hospital, Battle Creek, Mich., in 1940, and Fitzsimons General Hospital, U.S. Army, Denver, 1950; was a flight surgeon in the U.S. Air Force from 1941 to 1952; was staff physician at William H. Maybury Sanatorium, Northville, Mich., for one year before coming to Florida in 1953; limited his practice to pulmonary diseases and was Medical Director of the W. T. Edwards Tuberculosis Hospital, Tallahassee, at the time of his death; held membership in the American Medical Association, American Thoracic Society, American College of Chest Physicians, and the Florida Thoracic Society, of which he was a past president; died Sept. 24, 1964 of myocardial infarction, aged 54.

McKnight, William Joseph, St. Petersburg; born in Pittsburgh, Pa., on Nov. 14, 1929; University of Pittsburgh School of Medicine, 1957; served an internship at St. Francis Hospital in Pittsburgh and a residency at Mound Park Hospital in St. Petersburg; in 1960 entered the private practice of general medicine in St. Petersburg; was a member of the American Medical Association; died May 25, aged 34.

Nobles, Velpeau Robert, Pensacola; born in Pensacola in 1882; Atlanta College of Physicians and Surgeons, Atlanta, Ga., 1912; entered the general practice of medicine in Pensacola in 1912; was a life member of the Florida Medical Association, having been a member for more than half

a century; was a member of the American Medical Association; died April 2 after a long illness, aged 81.

Rafferty, Herbert Newell, Sebring; born in Palestine, Ill., on Sept. 19, 1878; Medical College of Indiana, Indianapolis, 1898, Jefferson Medical College, Philadelphia, 1899; interned at Phoenixville Hospital, Phoenixville, Pa.; engaged in the general practice of medicine and surgery in Robinson, Ill., for 48 years; since 1946 had resided in Sebring; had been active for many years in the Illinois State Medical Society, Illinois Surgical Society and Aesculapian Society of the Wabash Valley, held membership in the American Medical Association, and in Florida was an honorary member of the Highlands County Medical Society; was a member of the Selective Service Board of Highlands County for years and served as chairman until illness forced his resignation; died July 27, aged 85.

Rollins, Clarence David, Jacksonville; born on July 18, 1875, in Indian Town, S. C.; University of Maryland School of Medicine, Baltimore, 1905; after completing a residency at Maryland General Hospital, served residencies at Hospital for Women of Maryland from 1907 to 1910 and later studied at the University of Vienna in Austria; after a brief period of practice in Ellicott, Md., and eight years of practice in Lake City, S. C., had engaged in the practice of general medicine, obstetrics and gynecology since 1918; was a veteran of World War I; was a past president of the Tri-County Medical Association, Florence, S. C., and of the Lake City, S. C., Board of Health; held membership in the American Medical Association and the Southern Medical Association; was a life member of the Florida Medical Association, holding membership for 44 years; died April 11, aged 88, after a brief illness.

Smith, Carl Marquis, Clermont; born in El Dorado Springs, Mo., March 14, 1903; University of Kansas School of Medicine, Kansas City, Kan., 1936; served an internship at St. Luke's Hospital, Kansas City, Mo.; engaged in the practice of general medicine in Sedan, Kan., from 1937 to 1954; since 1954 had been engaged in practice with his brother, Dr. Kenneth Smith, in Clermont; held membership in the American Medical Association; died suddenly, June 14, 1964, aged 61.

Watters, Preston Hepburn, Miami; born in Boston, Mass., Jan. 12, 1907; University of Rochester School of Medicine and Dentistry, Rochester, N. Y., 1933; served an internship and a residency in medicine at Strong Memorial Hospital, Rochester, and as Clinical Instructor in Medicine at his alma mater; came to the Miami area in 1936 to engage in the practice of internal medicine at Coconut Grove, joining his father to carry on through the third generation the family tradition of the practice of medicine; was a fellow of the American College of Physicians and a member of the American Medical Association, the American Society of Internal Medicine and the Greater Miami Heart Association; died suddenly on Sept. 15, 1964 from a massive coronary infarction, aged 57.

Books Received

Give and Take. The Development of Tissue Transplantation. By Francis D. Moore, M.D. Pp. 182. Illustrated. Price $5.50. Philadelphia, W. B. Saunders Company, 1964.

Dynamic Pathology. Structural and Functional Mechanisms of Disease. By Maurice M. Black, M.D., and Bernard M. Wagner, M.D. Pp. 296. Illustrated. St. Louis, The C. V. Mosby Company, 1964.

Report of the Commission on Drug Safety. L. T. Coggeshall, M.D., Chairman. Pp. 228. Washington, D. C., Federation of American Societies for Experimental Biology, 9650 Wisconsin Ave., N.W., 1964.

Diseases of Metabolism. Detailed Methods of Diagnosis and Treatment. Edited by Garfield G. Duncan, M.D. Ed. 5. Pp. 1551. Illustrated. Price $28.00. Philadelphia, W. B. Saunders Company, 1964.

Massage. Principles and Techniques. By Gertrude Beard, R.N., R.P.T., and Elizabeth C. Wood, A.M., M.S., R.P.T. Pp. 163. Illustrated. Price $6.00. Philadelphia, W. B. Saunders Company, 1964.

Infectious Diseases of Children. By Saul Krugman, M.D., and Robert Ward, M.D. Ed. 3. Pp. 423. Illustrated. Price $15.75. St. Louis, The C. V. Mosby Company, 1964.

Proceedings of the World Forum on Syphilis and Other Treponematoses. U. S. Department of Health, Education, and Welfare, Public Health Service Publication No. 997. Price $4.00. Washington, D.C.

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Each tablet and each 5 cc. of liquid contains:
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The recommended initial *adult* dosage is two tablets (2.5 mg. each) three or four times daily, reduced to meet the requirements of each patient as soon as the diarrhea is controlled. Maintenance dosage may be as low as two tablets daily. *Children's* daily dosage (in divided doses) varies from 3 mg. for a child of 3 to 6 months, to 10 mg. for one 8 to 12 years of age.

cautions and side effects:

Lomotil is an exempt narcotic; its abuse liability is low and comparable to that of codeine. Recommended dosages should not be exceeded. Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness and insomnia. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates.

Lomotil is a brand of diphenoxylate hydrochloride with atropine sulfate; the subtherapeutic amount of atropine is added to discourage deliberate overdosage.

SEARLE

Research in the Service of Medicine

Better Health After Fifty. Edited and published by The Retirement Council, American Heritage Publishing Company, Inc., New York, N. Y. Pp. 128. Price $4.50. New York, Harper & Row, Publishers, 1964.

Fungus Diseases and Their Treatment. By Gavin Hildick-Smith, M.A., M.D. (Cantab.), M.R.C.P. (London), D.C.H., Harvey Blank, M.D., and Imrich Sarkany, M.R.C.P. (London). Pp. 494. Illustrated. Price $22.50. Boston, Little, Brown and Company, 1964.

Textbook of Pediatrics. Edited by Waldo E. Nelson, M.D., D.Sc. Ed. 8. Pp. 1638. Illustrated. Price $18.00. Philadelphia, W. B. Saunders Company, 1964.

Synopsis of Pathology. By W. A. D. Anderson, M.A., M.D., F.A.C.P., F.C.A.P. Ed. 6. Pp. 883. Illus. 406. Price $9.75. St. Louis, The C. V. Mosby Company, 1964.

Bahama International Conference on Burns. A Report of the Conference on Burns Sponsored by the Colonial Research Institute at West End, Grand Bahama, March 23, 24, and 25, 1963. A Symposium. Pp. 209. Illustrated. Price $12.50. Philadelphia, Dorrance & Company, 1964.

Clinical Neurology. By Frank A. Elliott, M.D., F.R.C.P. Pp. 688. Illustrated. Price $12.50. Philadelphia, W. B. Saunders Company, 1964.

Emergency Treatment and Management. By Thos. Flint, Jr., M.D., Ed. 3. Pp. 686. Illustrated. Price $8.75. Philadelphia, W. B. Saunders Company, 1964.

Handbook of Obstetrics & Gynecology. By Ralph C. Benson, M.D. Pp. 656. Illustrated. Price $5.00. Los Altos, Calif., Lange Medical Publications, 1964.

The Visual Fields. A Textbook and Atlas of Clinical Perimetry. By David O. Harrington, A.B., M.D., F.A.C.S. Ed. 2. Pp. 386. Illus. 318. Price $16.00. St. Louis, The C. V. Mosby Company, 1964.

Scintillation Scanning in Clinical Medicine. Based on a Symposium Sponsored by the Department of Radiology of the Bowman Gray School of Medicine. James L. Quinn, III, M.D., editor. Pp. 278. Illustrated. Price $11.50. Philadelphia, W. B. Saunders Company, 1964.

Common Bacterial Infections. Pathophysiology and Clinical Management. By Edwin J. Pulaski, Col., MC, U. S. Army. Pp. 301. Illustrated. Price $8.50. Philadelphia, W. B. Saunders Company, 1964.

Pediatric Procedures. By Walter T. Hughes, Jr., M.D. Pp. 208. Illustrated. Price $7.50. Philadelphia, W. B. Saunders Company, 1964.

Polypoid Lesions of the Gastrointestinal Tract. By Claude E. Welch, M.D. Volume II in the Series *Major Problems in Clinical Surgery,* J. Englebert Dunphy, M.D., Consulting Editor. Pp. 148. Illustrated. Price $7.50. Philadelphia, W. B. Saunders Company, 1964.

Experience in Renal Transplantation. By Thomas E. Starzl, Ph.D., M.D. Pp. 383. Illustrated. Price $17.00. Philadelphia, W. B. Saunders Company, 1964.

Respiratory Function in Disease. An Introduction to the Integrated Study of the Lung. By David V. Bates, M.D. (Cantab.), M.R.C.P. (London) and Ronald V. Christie, M.D. (Edinburgh), M.Sc. (McGill), D. Sc. (London), Sc.D. (Dublin), F.A.C.P., F.R.C.P. (London), F.R.C.P. (C). Pp. 566. Illustrated. Price $15.50. Philadelphia, W. B. Saunders Company, 1964.

Surgery of the Breast. By Louis H. Jorstad, M.D., F.A.C.S., F.I.C.S. With the collaboration of Meredith Jorstad Payne, M.D., F.A.C.S. Pp. 220. Illustrated. Price $15.00. St. Louis, The C. V. Mosby Company, 1964.

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FOR SUBLEASE: 650 sq. ft. in modern office building, 2909 N. Orange Avenue, Orlando, Florida. This can be subleased at a reduced rate. For further information contact L. Burton Parker, M.D., 601 E. Rollins Ave., Orlando, Florida.

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GENERAL PRACTITIONER WANTED (AAGP) for north Florida college town. Vacancy in busy two man practice in medicine, pediatrics and obstetrics. Immediate excellent income with eventual full partnership. Write 69-614, P.O. Box 2411, Jacksonville, Fla.

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The Florida Medical Association offers placement assistance through the Physician Placement Service, P.O. Box 2411, Jacksonville 3. This service is for the use of physicians seeking locations, as well as physicians seeking associates and is without charge.

Meetings

January

Seminar on Infectious Diseases, January 9, Auditorium, Duval Medical Center, Jacksonville.

Gastroenterology Seminar, January 14-16, University of Florida College of Medicine, Gainesville.

Seminar on "Dermatology in General Practice," January 14-16, Mound Park Hospital Auditorium, St. Petersburg

Pediatric Seminar, "Current Concepts in Allergy and Clinical Immunology in Childhood," January 21-23, University of Florida College of Medicine, Gainesville.

"Respiration," Second Annual Postgraduate Seminar, January 22-25, Eden Roc Hotel, Miami Beach. Sponsored by University of Miami School of Medicine and University of Florida College of Medicine.

Seventh Annual Conference, County Medical Society Presidents and Secretaries, January 23-24, Robert Meyer Motel Hotel, Orlando.

"Selected Aspects of Congenital Heart Disease," Regional Meeting, American College of Cardiology, January 28-30, University of Florida College of Medicine, Gainesville.

Seventh Annual Cardiovascular Seminar, January 30-31, Port-O-Call, Tierra Verde, St. Petersburg.

February

Midwinter Seminar in Ophthalmology and Otolaryngology, 19th Annual, February 8-13, Hotel Americana, Miami Beach

Seminar in Psychiatry in Medicine, Department of Psychiatry, University of Miami School of Medicine, Jackson Memorial Hospital, begins February 10, continues each week.

Central Florida Medical Meeting, February 11-13, Cherry Plaza Hotel, Orlando

Seminar on Surgery of the Hand, February 13, Auditorium, Duval Medical Center, Jacksonville.

March

Seminar in Obstetrics and Gynecology, March 4-5, University of Florida College of Medicine, Gainesville

Watson Clinic Seminar, "Recent Advances in Diagnosis and Therapy," March 6, Watson Clinic, Lakeland

Seventh Annual Conference

County Medical Society

Presidents and Secretaries

January 23-24

Robert Meyer Motor Inn

Orlando

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March 4-6, 1965

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John Lambert, M.D., Medical Director, Four Winds Hospital, Washington, D. C.

Zigmond Lebensohn, M.D., Chief, Dept. of Psychiatry, Sibley Memorial Hospital, Washington, D. C.

William Sheeley, M.D., Director of Psychiatry & Medical Practice Project of the A.P.A., Washington, D. C.

Philip Solomon, M.D., Chairman, A.P.A. Committee on Medical Practice, Boston, Mass.

Course will be given at Jung Hotel, 1500 Canal Street, New Orleans, La. Hotel reservations to be made directly with the Jung or hotel of your choice. Registrants who would like to enjoy Mardi Gras (March 2) are urged to make hotel reservations *immediately*.

Guest speaker for the luncheon on March 4 will be George Burch, M.D., Henderson Professor and Chairman, Dept. of Medicine, Tulane Medical School. Subject: "Emotions and Cardiovascular Disease." Cost of luncheon included in registration fee. At the end of Fridays session, there will be a dutch treat two-hour cocktail party with George Lewis and his band from Preservation Hall entertaining.

AMONG TOPICS TO BE DISCUSSED:

"Detection of Incipient Psychiatric Disorders During a General Medical Examination."
"Medical Practitioners and Supportive Handling of Schizophrenia"
"Adolescence—Disturbed and Disturbing"
"The Physician and His Reaction to the 'Crock'"
"Newer Thoughts About the Therapy of Alcoholism"
"Medical Conditions with Psychiatric Manifestations"
"Recognition and Treatment of Depressive Reactions by Medical Practitioners."
"Treatment of Emotional States by the Medical Practitioner"

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Touro Infirmary
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A. W. Martin Marino, Jr., M.D., Brooklyn, N. Y.
Colon and Rectal Surgery
Wiley Mitchell Sams, M.D., Miami, Fla.
Dermatology
Maurice L. Kelley, Jr., M.D., Rochester, N. Y.
Gastroenterology
Robert I. Wise, M.D., Philadelphia, Pa.
General Practice
Curtis J. Lund, M.D., Rochester, N. Y.
Gynecology
S. Gilbert Blount, Jr., M.D., Denver, Colo.
Internal Medicine
Jerome W. Conn, M.D., Ann Arbor, Mich.
Internal Medicine
Francis Murphey, M.D., Memphis, Tenn.
Neurologic Surgery
Bayard Carter, M.D., Durham, N. C.
Obstetrics
William F. Hughes, M.D., Chicago, Ill.
Ophthalmology
Milton S. Thompson, M.D., San Antonio, Tex.
Orthopedic Surgery
Benjamin Castleman, M.D., Boston, Mass.
Pathology
Harry C. Shirkey, M.D., Birmingham, Ala.
Pediatrics
Richard H. Marshak, M.D., New York, N. Y.
Radiology
Warren H. Cole, M.D., Chicago, Ill.
Surgery
Preston A. Wade, M.D., New York, N. Y.
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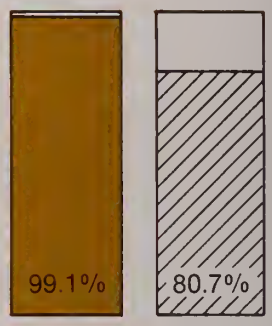
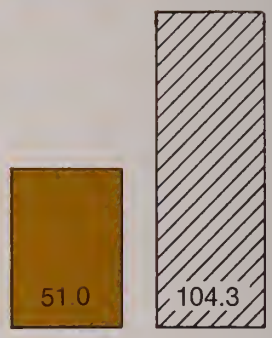


superior residual antibacterial effect confirmed by skin stripping technique

Safeguard and the other antibacterial bar soap were used for normal everyday toilet purposes by a group of housewives for 14 days. Layers of superficial skin cells were then taken by a stripping technique to determine the density of the bacterial population. The average count per 2.25 sq. cm. for Safeguard was 51.0 while the finding for the other antibacterial bar was 104.3—more than double Safeguard's reading.



superior control of S. aureus demonstrated in laboratory and field tests

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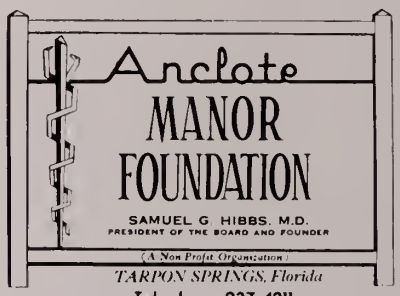

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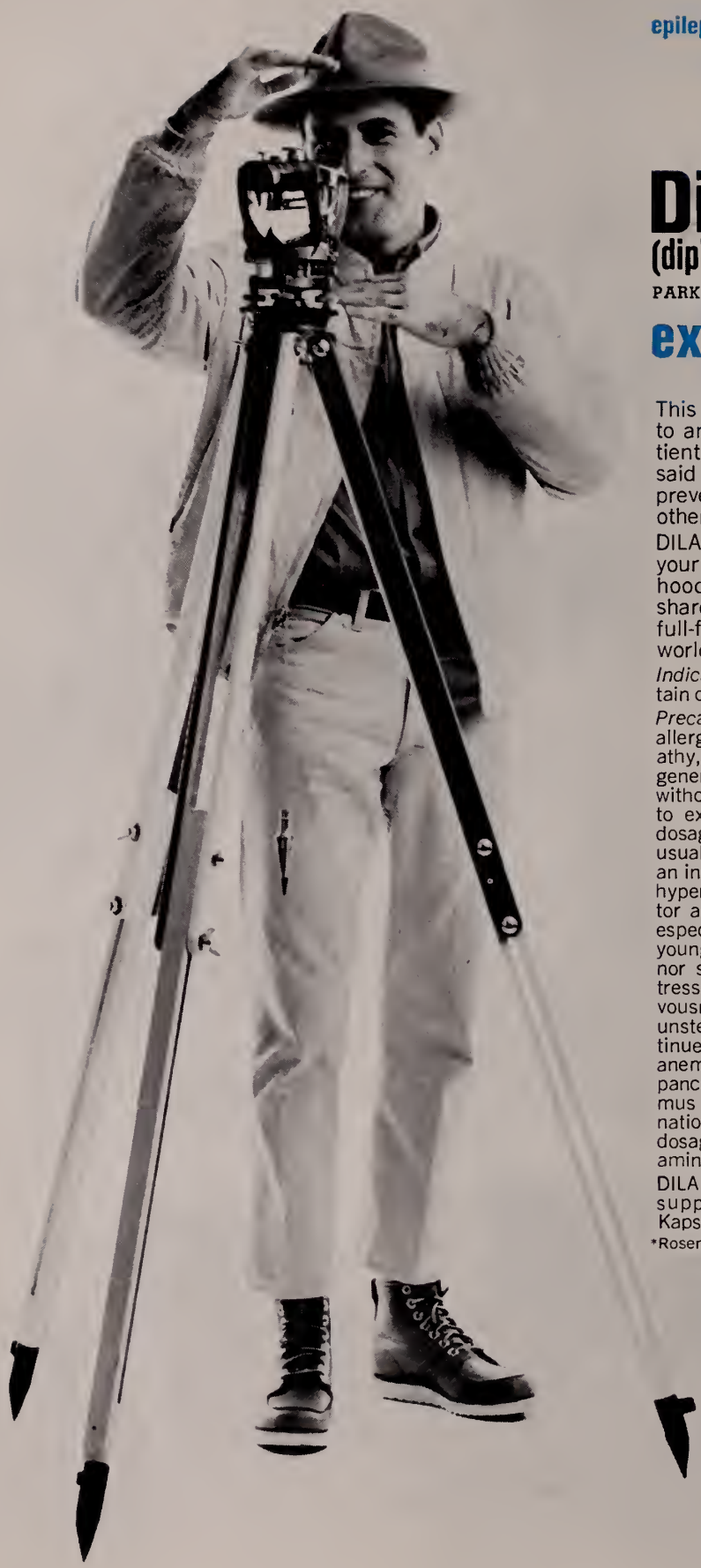

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*Roseman, E.: *Neurology* 11:912, 1961. 33664

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(1) Frykman, H.M.: Minn. Med., Vol. 38, Jan. 1955. (2) Poth, E.J.: The J.A.M.A., Vol. 163, No. 15, April 13, 1957. (3) McGivney, J.: Texas State Jour. of Med., Vol. 51, No. 1, Jan. 1955. (4) Stern, F. H.: Jour. of The Amer. Ger. Soc., Vol. 11, No. 3, Mar. 1963. (5) Weekes, D. J.: N.Y. State Jour. of Med., Vol. 58, No. 16, Aug. 1958. (6) Abbott, P.L.: Jour. of Oral Surg., Anes. & Hosp. Dental Serv., Vol. 19, July 1961. (7) Weekes, D. J.: E.E.N.T. Digest, Vol. 25, No. 12, Dec. 1963.

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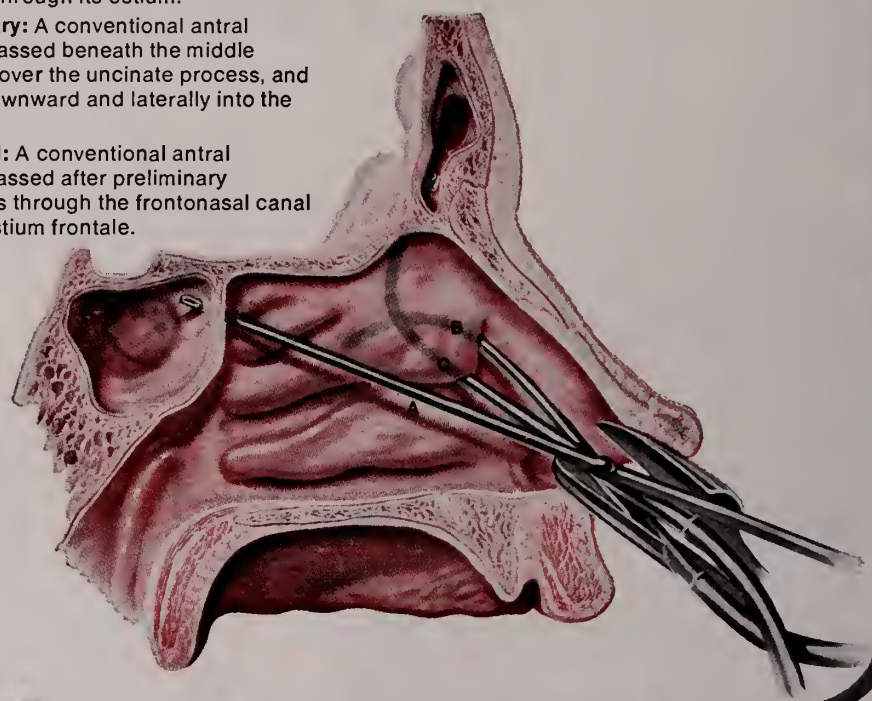

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Volume 52, Number 2, February 1965

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*Chupkovich, V.; Finnerty, F. A., Jr., and Kakaviatos, N.: The value of chlorthalidone plus reserpine in moderately severe and severe hypertension: A two year study. Presented at the 7th Inter-American Congress of Cardiology, Montreal, June 14—19, 1964.

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* AMA Council on Foods and Nutrition: The Regulation of Dietary Fat, *JAMA* 181:411-423 (August 4, 1962).
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References: 1. Millard, F. J. C., and Batten, J. C.: Brit. M. J. *i*:1159 (April 28) 1962. 2. Ivler, D., *et al.:* Abstracts, Third Interscience Conference on Antimicrobial Agents and Chemotherapy, October 1963, p. 32. 3. Stewart, G. T.: Pharmakotherapia *1*:197, 1963. (Progress in Drug Therapy). 4. Grant, I. W. B., *et al.:* Brit. M. J. *ii*:482 (Aug. 18) 1962. 5. Millard, F. J. C., and Batten, J. C.: Brit. M. J. *i*:644 (March 9) 1963. 6. Oswald, N. C.: Postgrad. Med. *35*:233 (March) 1964. 7. Howells, C. H. L., and Tyler, L. E.: Brit. J. Clin. Pract. *17*:321 (June) 1963. 8. May, J. R., and Delves, D. M.: Thorax *19*:298, 1964. 9. May, J. R., *et al.:* Lancet *ii*:444 (Aug. 29) 1964. 10. Pines, A.: Lancet *ii*:445 (Aug. 29) 1964.

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[1]Foret, J.: Antibiot. Ann. 1958-195

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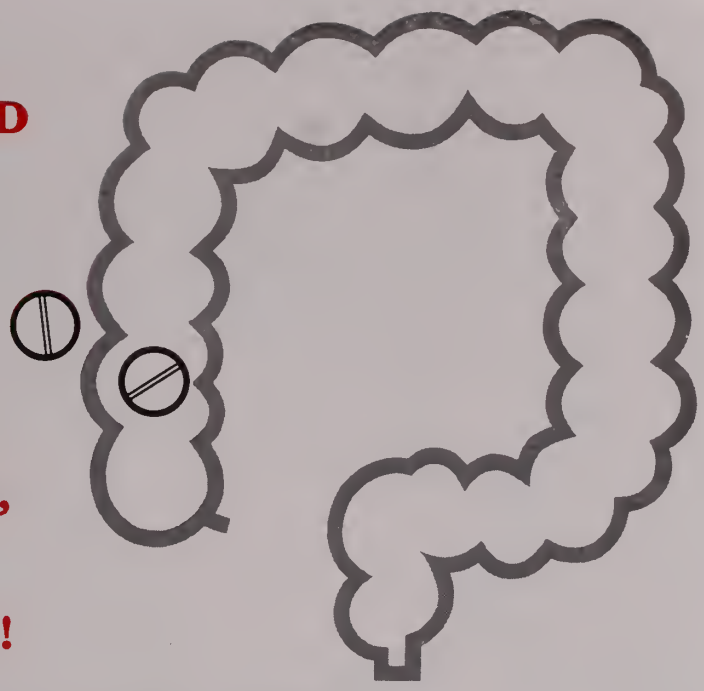

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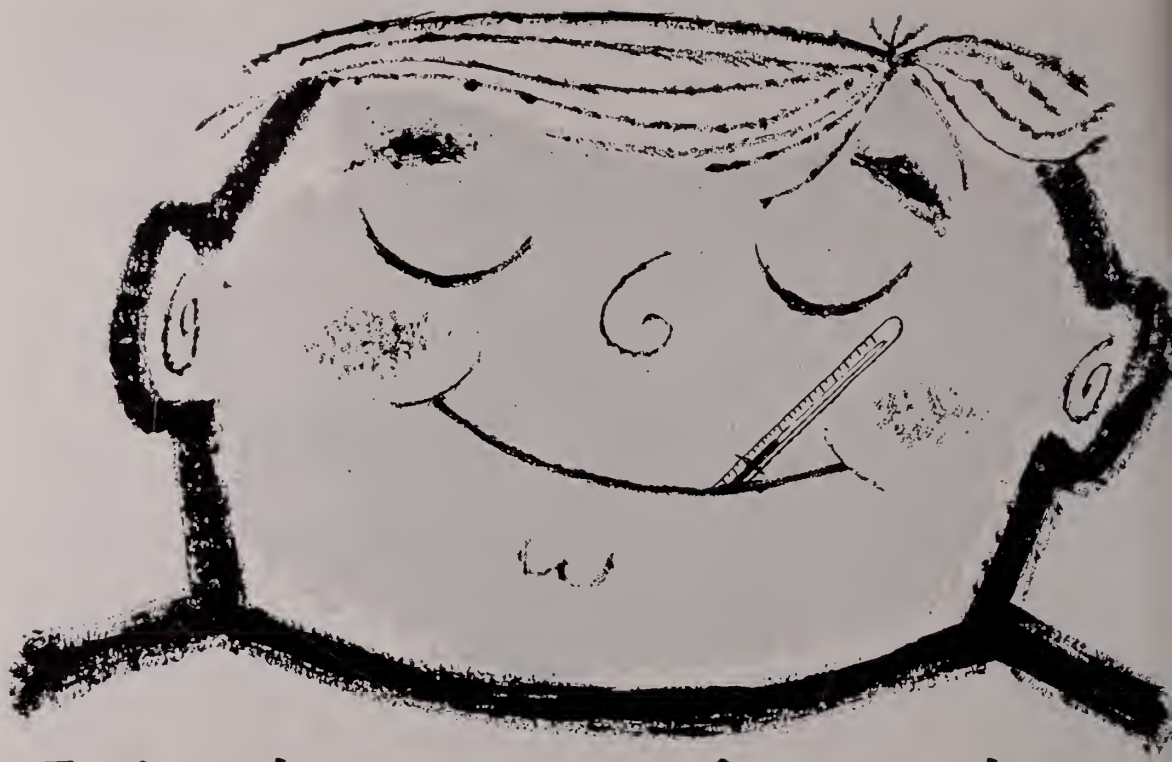

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SIDE EFFECTS: Blurring of vision, dry mouth, difficult urination or flushing and dryness of the skin may occur at higher dosage levels, rarely at the usual dose.

*This one at Oak Creek, Castle Rock, Arizona

References: 1. Hock, C. W.: Clin. Med. 8:1932, 1961. 2. Marks, L.: Am. J. Gastroenterol. 27:180, 1957. 3. Palmer, W. L., and Kirsner, J. B.: Therapeutics in Internal Medicine, 2nd ed., F. A. Kyser, Ed., Hoeber, New York, 1953, p. 368. 4. Ryan, J. P., Jenkins, H. J. and Robinson, S. M.: J. Pharmaceut. Sciences 53(9):1084, 1964. 5. Vollmer, H.: Arch. Neurol. & Psychiat. 43:1057, 1940. Abst. J.A.M.A. 115:333, 1940. 6. Wharton, G. K., Balfour, D. C., Jr., and Osman, K. I.: Postgrad Med. 21:406, 1957.

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The JOURNAL
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The Developmental Aspects of the Skeletal System with Reference to Skeletal Abnormalities

ERNEST D. GARDNER, M.D.
DETROIT, MICH.

Congenital deformities may be hereditary or they may be due to environmental disturbances during pregnancy. Many deformities can be produced experimentally in animals by a variety of agents. In recent years, the birth of deformed children to women who had taken thalidomide early in pregnancy has emphasized the importance of environmental conditions during pregnancy.

During certain periods of development, the embryo is particularly susceptible to disturbances of either hereditary or environmental origin. These sensitive periods are usually termed "critical periods."[1] The evidence for this susceptibility is mostly indirect, being based chiefly on experimental work. For example, the critical period during which anomalies of the feet of mice produced by x-rays or by nitrogen mustard coincides with a very early phase in the development of limbs. In terms of human embryology, this critical period corresponds approximately to four to five weeks after ovulation. Such findings are strongly supported by clinical evidence. In the phocomelias which appeared in almost epidemic numbers in Germany in 1959-1962, thalidomide being strongly implicated as the teratogenic agent,[2] the critical period appeared to be from four to six weeks after conception (six to eight menstrual weeks). It is clear that the timing of an interference with development is of great importance. Furthermore, a variety of compounds and procedures can produce similar defects if they are applied during the critical period. It is equally clear that some agents and procedures are specific. For example, hypervitaminosis A is extremely effective in producing cleft palate, whereas trypan blue, otherwise an effective teratogenic agent, is not.

The basic causes of anomalies are still to be determined. How an agent such as thalidomide can produce a phocomelia is still unknown. Current and future studies should be based on two components. One is the acquisition of knowledge of the nature and biochemical action of teratological agents. The other is the acquisition of knowledge of the effect of such agents on the developmental processes of the embryo.

Normal developmental processes are known fairly well for many mammalian species, including man, and the present account deals chiefly with these processes, particularly in the limbs. An extensive list of references is not provided. Most of the papers cited have detailed bibliographies.[3-10]

Normal Development and Growth

Bones and joints are self-differentiating structures, that is, they can attain their initial form and arrangements (up to the cartilaginous stage) through factors that are intrinsic to the cells which form them. External factors such as movement or pressure of growing parts are unimportant, at least during the early stages. After bones are formed, extrinsic factors become increasingly important. Also, the rate of growth of each bone with respect to other bones and to other parts of the body is so regular that this growth rate is obviously influenced by a growth-controlling mechanism common to the whole skeleton.

The limbs first appear as minute buds in human embryos about 5 millimeters long, that is, about four weeks after fertilization. The lower

Dean, Wayne State University School of Medicine, Detroit.
Read before the Florida Medical Association, Ninetieth Annual Meeting, Hollywood, May 7, 1964.

limb buds lag slightly behind the upper in development. Each bud is composed of undifferentiated cells. Shortly after they appear, cellular proliferation in each limb bud results in a centrally placed, longitudinally disposed mass of cells termed a blastema. The central part of the blastema begins to form cartilage and gives rise to the skeleton. The blastema that remains between the chondrifying elements forms homogenous, cellular areas termed interzones. Often these interzones become three-layered as two chondrogenic layers and an intermediate looser layer form. The capsule and most intra-articular structures (ligaments, menisci, synovial membrane) differentiate from the vascular mesenchyme that surrounds the joint area. By the end of the embryonic period (seven to eight weeks after fertilization; nine to ten menstrual weeks), the developing joints closely resemble adult joints in form and arrangement, and cavitation may be beginning.

The limbs develop in a proximodistal sequence, that is, the arm appears before the hand, and the thigh before the foot. By about five weeks after fertilization (seven menstrual weeks), individual muscles have differentiated from the outer part of the blastema, and the skeletal part is beginning to chondrify. Chondrification also proceeds in a proximodistal sequence (the humerus begins to chondrify before the radius and ulna). The elements of the carpus and tarsus chondrify in a precise sequence.[11]

During the fifth week, the long bones of the limb form in cartilage and come to resemble the adult bones in form and arrangement. By six and one-half weeks, primary bone collars may be present. By the end of the embryonic period, vascular invasion of the humerus may be underway, and endochondral ossification begins shortly thereafter.

The differentiation of bones and joints of the limbs from a generalized, cellular blastema to structures having a form and arrangement similar to the adult requires but a relatively few days. In man, it occurs during the period of about four and one-half to seven weeks after fertilization. During this time the differentiation of a single bone or a single joint usually requires no more than a relatively few days. Furthermore, for a limb as a whole, the differentiation is not only rapid but occurs in a precise sequence.

Disturbances of Development and Growth

From experimental studies, we know that the number and arrangement of skeletal elements are determined prior to the appearance of limb buds. An anomaly characterized by an increased number of skeletal elements, such as polydactylism, can result only from factors that operate before differentiation is underway. Once skeletal elements have begun to form, additional elements can no longer be formed. Normal accessory elements of the hand and foot (for example, os styloideum, os paracuneiforme, et cetera) can be observed in cartilage in the embryonic hand or foot.[12]

An anomaly characterized by a decreased number of elements (a true decrease, not one in which elements form and then regress or disappear) is due to factors that operate from just before limb buds appear until differentiation is well underway, that is, up to six weeks after fertilization. Thus, taking the time from just before limb buds appear up through the early part of differentiation gives a critical period of three to six weeks after fertilization (five to eight menstrual weeks) for skeletal anomalies of the limbs. The critical period for abnormalities of the skull and vertebral column would be roughly similar.

A decrease in the number of skeletal elements may result, not from failure to form, but from fusion. Fusion is the occurrence as a single element of something which is usually composed of two or more elements. Talocalcanean and calcaneonavicular fusions, as well as symphalangia, are examples that have been observed in the embryonic foot.[12] The early appearance of fusion suggests, not true fusion, but nonseparation of mesenchymal and cartilaginous primordia. In such instances, as in the relatively common os lunatotriquetrum, two ossific centers develop in a single piece of cartilage and then fuse.

Once skeletal elements are present, neither true increase nor decrease is possible. Subsequent changes, if any, must consist of interference with the growth and maturation of elements already formed. This growth and maturation can be considered in terms of cells, intercellular material (ground substance and fibers), calcification, and absorption. A great variety of skeletal abnormalities may result from interference with these phases of development and growth during pregnancy and may therefore be congenital.

Congenital abnormalities of genetic origin result from changes in the enzymatic control of intermediary metabolism. Those due to environmental changes may be indistinguishable morphologically from those of genetic origin, and presumably result from interference with metabolism

directly, or indirectly from chromosomal alteration. As mentioned previously, the basic biochemical mechanisms are unknown. The necessity for precise, modern, biochemical, morphological, and experimental methods of studying normal and abnormal prenatal development in placental forms is obvious.

References

1. Hamilton, H. L.: Sensitive Periods During Development. Ann. New York Acad. Sc. 55(2):177-187 (Aug.) 1952.
2. Millen, J. W.: Thalidomide and Limb Deformities, Lancet 2:599-600 (Sept. 22) 1962.
3. Frantz, C. H., and O'Rahilly, R.: Congenital Skeletal Limb Deficiencies, J. Bone Surg. 43-A:1202-1224 (Dec.) 1961.
4. Gardner, E.: Osteogenesis in the Human Embryo and Fetus, In Bourne, Geoffrey Howard, editor: The Biochemistry and Physiology of Bone, New York, Academic Press, 1956.
5. Gardner, E.: The Development and Growth of Bones and Joints, J. Bone Surg. 45-A: 856-862 (June) 1963.
6. Kalter, H., and Warkany, J.: Experimental Production of Congenital Malformations in Mammals by Metabolic Procedure, Physiol. Rev. 39:69-115 (Jan.) 1959.
7. O'Rahilly, R.; Gardner, E., and Gray, D. J.: The Ectodermal Thickening and Ridge in the Limbs of Staged Human Embryos, J. Embryol. Exp. Morphol. 4(3):254-264, 1956.
8. Saunders, J. W.: The Proximo-distal Sequence of Origin of the Parts of the Chick Wing and the Role of the Ectoderm, J. Exp. Zool. 108(3):363-403, 1948.
9. Saunders, J. W.; Cairns, J. M., and Gasseling, M. T.: The Role of the Apical Ridge of Ectoderm in the Differentiation of the Morphological Structure and Inductive Specificity of Limb Parts in the Chick, J. Morphol. 101:57-87, 1957.
10. Streeter, G. L.: Developmental Horizons in Human Embryos; Description of Age Groups XIX, XX, XXI, XXII and XXIII, being fifth issue of Survey of Carnegie Collection, Contrib. Embryol. 34:165-196, 1951.
11. O'Rahilly, R.; Gray, D. J., and Gardner, E.: Chondrification in the Hands and Feet of Staged Human Embryos, Contrib. Embryol. 36:183-192, 1957. Washington, D. C., Carnegie Institution Publication 611.
12. Gardner, E.; Gray, D. J., and O'Rahilly, R.: The Prenatal Development of the Skeleton and Joints of the Human Foot, J. Bone Surg. 41-A:847-876 (July) 1959.

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Psychiatric Aspects of Therapeutic Abortion

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With the advent of improved techniques for handling complications of pregnancy and thereby diminishing in importance this reason for therapeutic abortion, and because of the statutes which prevent social and humanitarian factors from being considered, psychiatric reasons for therapeutic abortion have been thrust into the spotlight. The questions being asked with increasing frequency appear to be: (1) Are there indeed *any* indications for the termination of pregnancy on purely psychiatric grounds? (2) If so, can criteria be established which would integrate these factors with existing laws?

Legal Aspects

It is almost impossible to speak of psychiatric indications for therapeutic abortion without also including discussion of the legal, medical, and ethical aspects of this problem. The Kinsey group in their third book stated that abortion is more of a problem in married women who have several children, contrary to the popular notion that it mostly involves illegitimate pregnancies. The more pregnancies they have, the more likely they are to seek abortion. This was also the conclusion in a review of therapeutic abortions at Jackson Memorial Hospital from 1960 to 1962. From these few statements one can begin to see the problem which confronts the medical profession in this area.

Since the termination of World War II, the psychiatrist has been asked to comment and give opinions in an ever expanding number of areas aside from medicine including legal, social, economic, and even political. Going along with this trend has been the great increase in psychiatrically recommended therapeutic abortions. An example is California, where a recent survey[3] revealed that over 50 per cent of therapeutic abortions were performed for reasons other than the physical health of the mother. In a recent 10 year period in New York state, the number had risen from 8.2 to 40 per cent.

In understanding the meaning of these figures, one must consider the legal aspects of therapeutic termination of pregnancy. All states have laws against a nontherapeutically induced abortion. In most states the law is specific enough so that one is not allowed to consider whether pregnancy will bring on or aggravate mental illness, or what the effect of mental illness in the mother might have on the child. In New York state, the only legally valid psychiatric reason for termination of pregnancy is danger of suicide; it must be a life-saving measure.[7] The "to preserve the life of the mother" clause is present in most of the state abortion laws. Florida is no exception, the statutes stating:

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> Every person who shall administer to any woman pregnant with a quick child any medicine, drug or substance whatever, or shall use or employ any instrument or other means, with intent thereby to destroy such child, unless the same shall have been necessary to preserve the life of such mother, or shall have been advised by two physicians to be necessary for such purpose shall in case the death of such child or of such mother be thereby produced, be deemed guilty of manslaughter.[10]

Social reasons such as pregnancy resulting from rape or grave economic instability are ignored by the Florida law as they are by the laws of the other states investigated.

Hospital Regulations

State laws, however, are not the only control of therapeutic abortion. Hospital regulations have been set up to consider questions in this area. The Jackson Memorial Hospital rules[9] state that private cases will have "at least two consultations other than the associate physicians before surgery." Staff cases "will have a minimum of two consultations, one of which will be the attending obstetrician in charge of the service, and the other, the Chairman of the Department, or a physician designated by him."

If laws and regulations are so specific, then why the controversy? It appears to be the result of interpretation. One example comes from the Sloan Hospital For Women.[8] In former years, the interpretation of the New York law was broadly taken by the administrators of this hospital to include the physical and mental health of the mother. At that time, abortions to preserve the physical and mental health of the mother were performed at the rate of 1 to 51 live births. After the formation of a committee to pass on these matters, the ratio went to 1 to 410 viable births. This eightfold decrease was due not only to the effect of tighter interpretation, but also to an increase in tubal ligations from 1 in 111 to 1 in 59 post partum. The committee members thought this increase in ligations avoided a possible abortion situation later on. They concluded that the cases which continued to be the most controversial were those which had psychiatric implications. They believed that this decrease in abortions was mostly the result of the committee insisting that the only psychiatric indication which complied with New York state law was the threat of suicide.

Sterilization

Since it appears that the number of tubal ligations has an influence on the number of therapeutic abortions, it might be well to consider the regulations governing this procedure. The State of Florida has no legislation covering sterilization. The regulations of Jackson Memorial Hospital are as follows:

> A. An anonymous panel is established.
>
> B. No female sexual sterilization shall be performed at Jackson Memorial Hospital until the following requirements have been complied with:
>
> 1) A recommendation for such procedure has been reviewed by a sub-committee of the Female Sterilization Panel Committee . . . and acted upon favorably.
>
> 2) At least one signed consultation recommending such procedure has been received from a member of the Medical Staff of the Jackson Memorial Hospital.
>
> 3) A letter of request for such procedure signed by the patient and her husband, or other legally responsible person, or other signed permission form approved by the legal advisors to the Jackson Memorial Hospital has been received.
>
> 4) Where the female in question is incapable of giving consent because of minority or considered incompetent to give consent to the proposed procedure, a Court decision should be a requirement.
>
> C. Regulations regarding males:
>
> Voluntary sterilization in the male may be performed for medical reasons only:
>
> a. Disease in the tissues to be removed.
>
> b. For the purpose of necessary surgical treatment of lower urinary tract disease.
>
> c. For adequate medical reasons affecting the health of the individual concerned, as concurred in by three physicians, with especial attention denoted to the possible untoward emotional effects of the operation.
>
> In all instances where sterilization is the expected result of any operative procedure, legal authority or the written and witnessed consent of the individual concerned will be obtained, together with that of the spouse wherever possible.[9]

Between 1960 and 1962, eight therapeutic abortions and 178 sterilizations in males and females were performed at Jackson Memorial Hospital. In the cases of abortion, seven of the women were private patients and one a staff patient. All but one were married and had children. Psychiatric considerations were of essence in four of the eight cases. In one of these four cases, the patient committed suicide a number of months after the therapeutic abortion was performed. There is no follow-up on the remaining three cases. In only one case was a broader interpretation of the statutes considered, the others being predominantly to preserve the life of the mother.

Psychiatric Criteria

Just as the interpretation of the statutes has varied, so the alleged psychiatric indications have also varied. No hard and fast criteria have been established for the indication of therapeutic abortion in connection with mental illness, and much

divergence of opinion exists among psychiatrists and others in the medical profession.

An example of one end of this continuum is represented by a study made recently in England.[17] Abortion in the interest of the mother's health is lawful in Great Britain, and what is likely to lead to serious impairment of the mother's mental health has been freely interpreted.

The study consisted of 213 patients who were investigated to determine whether psychosis in pregnancy could be predicted and what the outcome of such a psychosis might be. The investigators found that there was a total absence of unmarried mothers among the women with puerperal psychosis. Most of the psychotic reactions were characterized by depressive features. In patients with previous psychosis in pregnancy, it was difficult if not impossible to predict further breakdowns. In patients who were referred because of instability during pregnancy puerperal psychosis scarcely ever developed. No patient in the series suffered permanent mental damage as the result of the psychosis. In the vast majority recovery was rapid and the children thrived. There were no cases of a pregnant woman committing suicide. A review of suicides in Dade County, Florida, for 1962, numbering 183, also uncovered none in pregnant women.

The authors who reported this English study concluded that puerperal psychosis was unpredictable, that suicide in pregnancy was less of a risk than at other times, and that there were no psychiatric grounds for termination of pregnancy.

For those who take the view that psychiatric indications might exist, difficulties in evaluation have been pointed out in several areas:

1. The accuracy of forecast. The decision as to whether a woman's life is in jeopardy from a psychiatric point of view, unless a serious suicidal attempt has been made during the pregnancy, is an extremely difficult one. Friedman[5] thought that it has been based in the past solely on the psychiatrist's personality, training and anxieties, rather than on any objective scientific criteria. Many psychiatrists have stated that they do not know of a single woman who has successfully committed suicide under the conditions of an unwanted pregnancy, and it is certainly the consensus[3] that these women rarely carry out the threat if it is made.

2. The time element. The psychiatrist is under great pressure to give some kind of an answer within at best two to three visits. Pressure from the obstetrician to be within the first trimester, and pressure from the patient and the patient's family all exist in these situations. Any evaluation runs the risk of being incomplete and not objective under pressure. There is also pressure from the referring physician, who has already made up his mind, but can find no good medical reason for the abortion.

3. The rigidity of the law. The desire for all concerned to consider social, economic, and humanitarian factors when the law excludes these areas also makes some of the decisions most difficult.

The problem, then, is either to attempt to get legislation which would be more plastic, or to develop a set of psychiatric criteria which would fit the law. These might be based on several factors.[5]

1. Did the patient attempt suicide? If the patient made a definite suicidal attempt and not just a verbal threat, abortion should be considered.

2. If the diagnosis is an endogenous depression, then shock or drug therapy is indicated, and not necessarily therapeutic abortion.

3. If the patient is suffering from a neurotic depressive reaction, has been in psychotherapy prior to pregnancy, and at that time showed definite objective evidence of depression accompanied by a suicidal threat, then therapeutic abortion may be indicated.

4. The patient's religious training should be taken into account. If the religious tenets do not condone therapeutic abortion, then abortion might lead to secondary guilt with marked suicidal trends.

5. The desire for abortion should come from the patient and not from the spouse or other relatives.

Other criteria[1] which have been suggested recently are: A history of mental illness (1) related to pregnancy or birth, (2) which required hospitalization, (3) associated with hallucinations, delusions, or ideas of reference, (4) requiring shock therapy, (5) lasting one month or longer, (6) associated with suicidal attempts or trends and (7) associated with assaultiveness or homicidal trends.

Sequelae

What are the possible after effects of therapeutic abortion? American medical literature contains frequent mention of psychiatric illness following abortion. Up to 1963, however, no sta-

tistical documentation had been attempted. Kummer,[2] in a survey of American psychiatrists, indicated that psychiatric illness following abortion, both criminal and therapeutic, occurred rarely or not at all. Part of the preliminary survey included 32 psychiatrists of whom 75 per cent had never encountered any moderate to severe psychiatric sequelae of abortion. Of the remaining 25 per cent, the highest incidence was six cases in 15 years of practice. Ekblad in Stockholm, following up 479 women aborted for psychiatric reasons, indicated that psychiatric impairment in their ability to work developed in only 1 per cent. A study from Copenhagen reported no significant after effects in 30,000 legal abortions performed in the past 15 years.

These findings must be contrasted with the substantial incidence of psychiatric illness complicating pregnancy and childbirth. Of more than 100,000 female patients admitted to mental hospitals in the United States between 1916 and 1964, in 2 per cent the illness was precipitated during pregnancy or the postpartum period. Another survey of the United States and Europe revealed one postpartum psychosis in every 500 births. It would appear from these figures that pregnancy and parturition constitute far more of an emotional stress to susceptible women than does the termination of pregnancy by mechanical means. These studies are of immediate importance in helping formulate criteria.

Conclusion

It appears then, that the problem confronting psychiatrists in this area at the present time is twofold:

1. The development of criteria indicating psychiatric reasons, if any, for abortion which are compatible with existing state laws and/or
2. The stimulation to change laws so that they may allow the inclusion of economic, social and humanitarian factors in the decisions.

References are available from the authors upon request.

Jackson Memorial Hospital.

Recognition of Surgical Emergencies in the Newborn

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Successful surgical treatment of many abnormalities of the newborn infant is now possible because of improvements in techniques, anesthesia and antibiotics. It is of prime importance, however, that these conditions be recognized early before damage or deterioration in the general condition occurs to a point where the infant cannot tolerate surgery. It is my aim to review some of these conditions that require immediate relief and point out some of the signs and procedures that should be utilized in recognizing need for surgical intervention.

Fortunately, need for surgical intervention in the newborn is rare. Approximately two infants per thousand live births will require surgery in the neonatal period (first month of life). This rarity may, however, tend to place one in a complacent attitude of seeing normalcy that makes overlooking the rare condition more likely.

Read before the Florida Medical Association, Ninetieth Annual Meeting, May 8, 1964.

It is absolutely essential that delivery and nursery personnel maintain constant vigilance in order that conditions requiring surgical intervention will not be overlooked. A routine must be established so that it is noted when a newborn fails to void or have a stool. Babies should be kept in a separate area until they have had a complete physical examination, been observed closely for at least 24 hours and have taken and retained one or two water feedings.

Indications for Surgical Correction

As soon as a newborn infant is delivered, everyone having contact with him should be alert for signs indicative of trouble. Before the cord has been clamped, it should be examined for herniation of gut into it. The first respiratory effort will indicate the presence of choanal atresia which requires immediate insertion of an airway, or laryngeal obstruction from congenital webs.

The receding chin ("Andy Gump" facies) of

an infant with Pierre-Robin syndrome should be the clue for prompt recognition and proper treatment directed at preventing the tongue from occluding the pharynx.

Respiratory distress is by far the commonest difficulty encountered during the newborn period. Usually it is due to atelectasis, hyaline membrane disease or other such problems of aeration which are nonsurgical. It is important, however, to differentiate between these medical conditions and several which require immediate surgical intervention.

The presenting symptom of a tracheoesophageal fistula or esophageal atresia is usually respiratory difficulty. When this condition is present, need for aspiration of oral and pharyngeal secretions is abnormally great and on attempt to feed the infant, cyanosis and choking occur.

It is especially important that the first oral feedings be water so that the presence of esophageal atresia or fistula can be detected before the lungs are filled with formula. Any infant exhibiting excessive secretions and choking should have a nasogastric tube passed. This procedure in itself may indicate the presence of an obstruction. If trouble is suspected, a small amount of radiopaque material which is nonirritating to the lungs can be instilled for visualization of the esophagus and any abnormal communication that may be present. The importance of recognizing this abnormality before prolonged aspiration of gastric juices and before feeding of formula cannot be overemphasized because even the best surgical care cannot undo the damage that results from filling the lungs with formula, barium, or prolonged reflux of gastric juices.

Pneumothorax or pneumomediastinum may occur as a result of trauma to the chest during delivery. Congenital lung cysts inflate rapidly and can encroach upon the normal lung tissue, causing respiratory embarrassment. Diaphragmatic paralysis due to phrenic nerve injury may also decrease the effectiveness of the respiratory effort to a point of distress. Careful physical examination for signs of abnormal displacement of the mediastinum, hyperresonance or dullness, localized abnormalities of breath sounds, and abnormal or paradoxical movements of the chest wall should suggest the possibility of these crowding conditions. X-ray examination is necessary to differentiate these various conditions and to evaluate treatment indicated.

Diaphragmatic hernia should be considered in any infant with respiratory difficulty. Chylothorax may also occur in the newborn infant due to trauma to the thoracic duct.

Congenital heart abnormalities which are severe enough to cause symptoms in the first few days of life are rarely amenable to surgery. Symptoms that should suggest congestive heart failure are respiratory difficulty and cyanosis (without pulmonary cause), enlarging liver, edema, abnormalities of cardiac rhythm and rate, heart enlargement, and murmurs. Peripheral pulses may be absent or diminished.

When evidence of failure occurs in the newborn period, prompt investigation by cardiac catheterization and angiocardiography may be indicated. Occasionally, a large ductus, or narrow preductal coarctation can be the cause of such failure and surgical correction can be accomplished with complete cure. Certain anomalies of venous return or major vessel transpositions can be palliated by the establishment of a shunt.

Congenital Anomalies

Many different congenital anomalies of the intestinal tract occur, and I will not attempt to enumerate them. I would like to emphasize that pyloric stenosis, intussusception, and perforation of a viscus can occur in the newborn, and should be considered in the differential diagnosis. Strangulated hernias can also occur. Any type of intestinal obstruction will cause vomiting from the start. Distention and palpable masses are other important signs of obstruction. X-ray examination will usually be very helpful in determining the nature of the disorder. The meconium should be examined and when meconium ileus is suspected, sweat electrolyte determination by iontophoresis of pilocarpine can be done even in the very young infant. It is of prime importance not to fill the obstructed intestinal tract with formula or contrast medium. When an obstruction is suspected, only water should be offered the infant, and persistent vomiting should be a signal to stop all oral feedings. Although it would seem trite to mention it, please do not fail to insert a digit into the rectum. It can be very revealing.

In evaluating a vomiting infant, consideration must be given to a variety of different conditions. The symptom of vomiting can occur from malfunction of practically any system in the body, and may be of intracranial, pulmonary, obstructive, renal, infectious, or traumatic origin. Formula imbalance is the most frequent cause.

Central nervous system disorders make up a fairly large percentage of infants requiring surgery. One of the commonest abnormalities is meningomyelocele. These are not dire emergencies unless ruptured and are readily recognizable.

Intracranial bleeding localized to the subdural space calls for immediate action—subdural tapping—and may be life-saving. Convulsions, paralysis, vomiting, respiratory symptoms, unusual lethargy, may all be symptoms of this disorder. The only certain way to make the diagnosis is by inserting a needle into the subdural space. In the newborn this procedure is relatively simple via the fontanelles and should certainly be done when increased pressure and other signs indicate a possibility of subdural hematoma.

In regard to the urinary tract, extrophy of the bladder, which is obvious, and urethral obstruction are the principal conditions that call for immediate action. Perirenal hematomas and tumors usually are not dire emergencies and there is ample time for investigation.

Summary

In this brief resume, an effort is made to orient thinking toward the everyday problems that arise in the newborn nursery, and in infants recently discharged from the nursery. Fortunately, most babies are normal. This fact in itself, however, must not be responsible for letting an infant with a correctable defect reach a point where even skilled surgical care cannot cope with irreversible deterioration. The signs and symptoms indicative of possible abnormalities amenable to surgical treatment are discussed.

Finally, there is no substitute for dedicated, experienced nursery personnel. They must of necessity be the first line of defense and failure to listen to them can be catastrophic after discharge from the nursery.

2855 Fifth Avenue North.

Proposed Involuntary Commitment for Alcoholics

Hon. Mervin Rehrer
Avon Park

The program lists the subject on which I am about to speak as "Proposed Involuntary Commitment for Alcoholics." Before getting into the matter of the involuntary treatment program, let us first briefly review the alcoholism problem itself and then the present treatment facilities available for alcoholics in the State of Florida and other states and countries. We will then get to the proposed involuntary treatment program as proposed by the Florida County Judge's Association.

Not too many years ago any man or woman who was an alcoholic was referred to as a common drunk, and the individual was more or less shunned by society. Of course, this does not differ too much from the conception of the mentally ill person of not too many years back. At one time the mentally ill person was a source of embarrassment to the family and community and was often confined to a back room in the house or committed to a state hospital for confinement purposes rather than with the hope or intention of treating this mentally ill person and rehabilitating him to a point where he again could assume his role as useful citizen. The alcoholic today is generally considered and accepted as being an ill person, and during the past 20 years, we have made great strides forward in educating the public to the effect that the alcoholic is a sick person and in providing treatment facilities in an effort to rehabilitate the individual.

We can little afford to ignore alcoholism as a social or economic problem within the United States when we have between five and six million alcoholics. According to a recent report put out by the National Committee for the Prevention of Alcoholism, alcoholism has moved up to the number three public health problem in the United States. This same report points out that only 1

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Read before the Florida Health Officers' Society, Hollywood, May 9, 1964.

per cent of our alcoholic population is being rehabilitated in spite of our various state programs established for the purpose of rehabilitating alcoholics. When a problem has reached these figures, we cannot stand by and ignore it. I am sure that you members of the medical profession are quite aware of the problem and probably more aware than many members of the judiciary of the State of Florida.

If any of you have ever attended a meeting of the Alcoholics Anonymous, you will notice that the speakers start out with "I am John Doe, an alcoholic." I am happy to say that I do not introduce myself in this manner. Fortunately, I am not an alcoholic and I am not exposed to the problem within my family. I have gained a keen interest in the problem through my close association with Earnest Shepherd, the administrator of the Florida voluntary treatment program for nine years, and with other members of the staff at the rehabilitation center in Avon Park where I reside. My interest in the problem of alcoholism was intensified when I assumed the bench for the first time in 1957 as County Judge for Highlands County, Florida. The County Judge's Court in Highlands County, as in 56 other counties within the State of Florida, has criminal jurisdiction as well as other judicial and administrative jurisdictions and responsibilities. It is in the Criminal Court where we see the chronic alcoholic offenders appearing week after week, month after month and year after year.

According to the Florida law, the County Judge, upon the defendant entering a plea of guilty or a jury returning a verdict of guilty, has only the authority to fine the individual or to commit him to jail. It is rather apparent that many of these defendants are alcoholic and that they are in Court because of this alcoholism. Experience has shown us that the chronic offender normally does not have the money to pay fines and that serving time in jail does not tend to rehabilitate him. But those are the choices that are left to us, and often while he is serving his time in the county jail, the County or State must support his family. We cannot require that he avail himself of the rehabilitation program either through the center in Avon Park or one of the too few outpatient clinics since the program as it is set up today is strictly on a voluntary basis. The members of the judiciary handling criminal cases, and this is not only the County Judges but Justices of the Peace, Circuit Judges, Criminal Court of Record Judges and City Judges, feel a great need for a procedure whereby this ill person, whether the illness be physical or mental, can be helped rather than committed to a jail where we know from the beginning that he is not being helped.

As we stated earlier, the field of rehabilitating alcoholics is comparatively new. Many of the states, territories and countries have initiated a voluntary program. These programs serve a very good purpose and are showing good results; however, they do not reach nearly enough of the alcoholics who need the help. In the State of Florida alone we have approximately 160,000 alcoholics today.

Involuntary Treatment Program

Only a few of the states and territories now have an involuntary or coercive treatment program. More recent moves and trends have been toward an involuntary treatment program. Those in existence today are varied and to my knowledge no two are the same either in procedure or, in fact, to the same extent.

In the spring of 1962, the members of the Florida County Judge's Association, after arriving at the conclusion that an involuntary treatment program of some sort should be initiated for the State of Florida, passed a resolution requesting that the Alcoholism Council for the State of Florida authorize the alcoholic rehabilitation program to make a study of the involuntary treatment programs in some of the other states, provinces and territories. This resolution was presented to the Florida Council on Alcoholism by your speaker in person. The Council refused the request as contained in the resolution. Consequently, we have not had the benefit of a study of other states where an involuntary program has been in force and effect. Numerous publications, however, and reports from states where they have an involuntary treatment program indicate that these involuntary treatment programs are effective and that the percentage of success in rehabilitating or relieving the situations is almost as great as in the voluntary program.

After all, how many of their voluntary admittees are strictly voluntary? Often it is voluntary to this extent—"Either you go to the alcoholic rehabilitation center, or I go to the divorce court." Or the employer says, "Either you go to the alcoholic rehabilitation center or find yourself another job."

At one point the committee was thinking in

terms of direct commitments of alcoholics who come into court charged with criminal misconduct. There are many pitfalls to the direct commitment procedure. Who are we, as county judges, justices of peace, criminal court of record judges, circuit judges, or municipal judges, to determine that an individual is an alcoholic? As members of this committee, we do not feel that we, individually, would want to assume this responsibility. A direct commitment by the various judges to a rehabilitation center would require immense facilities and staff, at an expense which would probably make such a program prohibitive, insofar as the public and insofar as the legislative bodies are concerned.

The members of the judiciary are quite aware that we do not have a sufficient number of outpatient clinics at this time to handle the work load that would be created through an involuntary program. At the same time we feel that the use of the outpatient clinics would make an involuntary program much more effective. These outpatient clinics, and we would need more of them, would be able to serve a greater number of alcoholics, at less expense to the state. There would be no cost for housing and feeding the alcoholics, which averages approximately $12.50 per day per patient at the rehabilitation center. Furthermore, by employing the outpatient clinics in the program, the individual could continue in his employment and be a wage earner while he is receiving the help he needs under the court order. Since he can continue working, his family will not be a problem for the local or state welfare agencies. This would be a decided argument in support of such a coercive treatment program.

We should bear in mind that the members of the judiciary are not authorities in the field of rehabilitating alcoholics and we would not for a moment propose to tell the program how to operate or how many outpatient clinics they might need or whether a particular individual should be confined to the center or assigned to an outpatient clinic. This is their problem. They are trained for this work and are specialists in this field. It is our hope merely to provide some means of getting the ill alcoholic to the facility where they could, by their determination, confine him to the center for intensive treatment for a period of time or assign him to an outpatient clinic, or even refer him to an active member of Alcoholics Anonymous to work with him with the idea of rehabilitating the individual. The program personnel would know better than we the nature and extent of the treatment needed by the alcoholic.

It is difficult, if not impossible, for us as untrained judges, to make a proper diagnosis and determine whether or not a person is truly an alcoholic. Consequently, our committee suggested that we promote a procedure similar to the present incompetency procedure; that is that the legislature give authority to the Justices of Peace, to our City Courts, the County Judges, the Criminal Court of Record Judges and the Circuit Judges, to defer sentencing, or to sentence and suspend the sentence of an individual brought before that particular court, and then refer the individual to the County Judge's Court by petition as in an incompetency proceeding, that the County Judge should then appoint a committee, comparable to our incompetency committee; and that alcoholic rehabilitation program personnel be utilized in these committees when possible. If it is found by this committee that the individual is *not* an alcoholic, then the County Judge, acting as incompetency court, should return the individual to the court of origin and dismiss the petition on alcoholism.

If, on the other hand, the committee finds that the individual examined *is* an alcoholic, the County Judge's Court should have the authority to refer the individual to a rehabilitation center, or outpatient clinic for further diagnosis and screening, and then assignment or referral to a rehabilitation center, outpatient clinic, a state hospital, or in fact an AA group under direct supervision of a member of that group; that a certified copy of the County Judge's Court disposition be forwarded to the referral court, and to that segment of the rehabilitation program involved. The rehabilitation agency to which the individual is assigned, should advise the court of commitment (the County Judge's Court) as to the progress of the individual, or his failure to report for the treatment ordered by the court, and to advise the court of a final discharge by the rehabilitation facility; that a copy of these reports should be sent to the court of original jurisdiction which referred the individual to the county judge's court for examination, so that they might at all times be advised of the status of the individual, and if he, the alleged alcoholic fails to comply with the conditions of the court handling the incompetency, the court of referral may call back the individual for sentencing or cancelling the suspension of a sentence.

In noncriminal cases, the petition for examination of an alcoholic should be presented to the County Judge's Court as in our present incompetency proceedings. The Court, upon a finding of alcoholism, should make referrals as described to the proper agency, and the agency should keep this court advised at all times. Upon failure or refusal of the individual to comply, he is to be treated as in contempt of court for not complying and is to be dealt with accordingly.

In meeting with a group of judges representing the other courts of the State of Florida, including the City Judges, Justices of Peace, Criminal Courts of Record Judges and a Circuit Judge, the chairman of this committee and the other judges present were of the opinion that there should not be an additional tax on alcoholic beverages to finance the program as proposed, but that, on the other hand, a larger percentage of the tax that is now realized from the sale of alcoholic beverages be applied to the program.

Two years ago in the State of Florida, we realized $50,000,000 annually from the alcoholic beverage taxation. I am not aware of the present income from the sale of alcoholic beverages in the State of Florida, but since the tax was raised by the 1963 Legislature, and I have no indication that the consumption has decreased, we can well assume that the present income from this source is in the neighborhood of $60,000,000 per year. The present voluntary alcoholic rehabilitation program gets only 1 per cent of this income annually. In order to carry out the program this committee proposes, it would be necessary to increase to 2 or 3 per cent the amount to be allocated to the alcoholic rehabilitation program in the State of Florida, employing this coercive or involuntary treatment program. It is the feeling of our committee, and of the other judges of other jurisdictions that we use this source of revenue to cure some of the evils growing out of the product that creates this revenue.

Pilot Program

As stated before, as we are probably all aware, the field of involuntary treatment for alcoholics is comparatively new, and we are venturing into a field without any assurance that this is the proper procedure although we can reasonably assume that it will have beneficial effects and will, in all probability, prove to be a sound program. Consequently, this committee has a substitute recommendation to make to the Florida County Judge's Association and that is that we seek and work toward a demonstration program, or pilot program, to test the idea as herein discussed.

Considering the cost of increasing the present alcoholic rehabilitation center in Avon Park by 20 beds at a cost of approximately $100,000, which has been appropriated by the 1963 Legislature, expanding the unit center for screening and diagnostice services, providing an additional social worker, and adding two additional workers to the already established clinic, plus two additional workers—social or probation—providing for one additional psychiatrist and additional other help as required, it would require an additional $200,000 for a two year period to set into operation a program as here set forth, on a four county area.

We have considered the possibility of promoting such a demonstration program using Highlands County, where the center is now located, Polk County where there is not an outpatient clinic but a number of larger cities, Hardee County, a typical small rural county, and Hillsborough County where an outpatient clinic is already established and in operation. All these counties are adjacent to each other, and a demonstration program could very readily be tried on this small scale without requiring any additional taxation or without requiring any additional proceeds from the tax already realized through the sale of alcoholic beverages, but by merely appropriating an additional $200,000 of the income received through taxes on alcoholic beverages.

If a general law was passed, establishing this area as a demonstration program that authorized the expenditure of these amounts over this two year period, from now until the next session of the legislature, we could have a thorough study of the results obtained, and, if it is found that such a program has merit, then the program could be applied to the state as a whole by the 1965 Legislature. If, on the other hand, it is found not to serve the purpose for which it is proposed, then the program could be discontinued at no loss of revenue to the state treasury, except the $200,000, referred to.

The Aquatic Evolution of Man

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In recent years we have witnessed marvels achieved by man which were considered far from the realm of possibility only a few years ago. Not too long ago the world was astounded by Lindbergh's flight across the Atlantic. Thirty-five years later a more sophisticated audience was probably less astounded by Glenn's orbit into outer space.

Man is now capable of flying faster than the swiftest bird, tunneling the earth more effectively than the strongest mole, descending to aquatic depths deeper than attained by the greatest whale, detecting sounds more efficiently than the keenest-hearing bat, detecting odors more keenly than the finest bloodhound and detecting various waves of the atmosphere unknown to any other living creature. Unfortunately he is able to destroy himself and any other living being more effectively than any species that has ever traversed the earth. Most of these attainments he has achieved in the past one hundred years. There has been no detectable organic evolution of man during this amazing era of accomplishment.

Social Evolution

Millions of years were required for evolutionary changes during the transition of man from the crossopterygian fish to his present mammalian status. Preadapted for a land environment, the crossopterygian fish was the first vertebrate to inhabit the land. The gradual transition of descendants by modification of previous ancestors of the plant and animal world is known as organic evolution. This phenomenon occurs by such slow processes as catastrophism, mutation, postadaptation, preadaptation, and natural selection. The superb mind of man is largely responsible for his superiority over the animal kingdom and his many recent accomplishments. His mind evolved through the slow processes of organic evolution. Man has developed means of communication by written and spoken language. This made possible the transmission of ideas and achievements from generation to generation and individual to individual. The ability of man to utilize and add to the achievements of his predecessors is known as social evolution. Through this process man has been able to adapt his environment to himself instead of adapting himself to his environment. Leonardo da Vinci's ideas of flight were transmitted to the Wright brothers, who in turn developed the first airplane, which in turn led to the development of our present jet aircraft and orbital flights by this process of social evolution.

Man's Aquatic Adaptation

For thousands of years man has contemplated returning to the sea from whence he came. Centuries of imagination, endeavor, and patient experimentation were necessary, however, before his ingenuity enabled him to adapt himself to the underwater world. Through processes of social evolution man has made real strides in recent years toward this return to the sea. The whale through a process of organic evolution evolved from a terrestrial ancestor and returned to the sea some one hundred to two hundred million years ago. Man without any structural organic evolution is now capable of achieving many of the accomplishments of the whale or has surpassed this aquatic mammal through utilization of his social inheritance.

All aquatic animals are able to protect their respiratory tract by valvular closure of the nostrils as is seen in the porpoise, whale, sea cow, and sea elephant. Man has been able to achieve this protection by the development of proper methods of breathing while swimming. A positive pressure in the nose prevents the entrance of water. He is also capable of accomplishing this objective by holding his nose, using a nose clip, or wearing a face mask.

The locomotion of man underwater probably began with the dog paddle and evolved through the side stroke, breast stroke, and then the Australian crawl. Man is able to protect his nasal mucous membranes from water by proper breathing while swimming. The mouth is used for inhalation and the nose for exhalation. By proper control of breathing he is even able to eat or drink when submerged.

Aquatic animals also protect their ears from water. They have tight ear flaps to protect the ears when submerged as is seen in the alligator

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and seal. Man is now able to do so with the use of headgear or ear plugs.

Man lacks the modification to maintain a normal temperature in cold water for any great length of time. The ratio of conductivity of water to air is 27 to one. A man submerged in water will lose his body heat 27 times as fast as in air at the same temperature. This loss leads to lowered resistance and invites infection. Aquatic mammals are protected against the loss of body heat by a thick layer of blubber or fur. Man must protect himself by limiting the amount of time he stays in the water or by exercising while submerged. He has now designed suits and is in the process of developing underwater housing to protect himself against loss of body heat while submerged.

He has learned to explore the subaquatic world with a face mask and breathing tube. The face mask allows for clear vision by providing an air space between the eyes and the water. The breathing tube or snorkle allows him to breathe on the surface while observing continuously with his head partially submerged.

Man has recently made great strides in his evolution into the subaquatic world. Evolving into the underwater realm necessitated his adaptation to increased pressure. External water pressure increases at the rate of about one-half pound for each foot of descent. Every 33 feet of water exerts a pressure equivalent to one atmosphere of pressure or 14.7 pounds per square inch. Since the human body is composed mostly of solids and fluids, it is able to withstand increased pressure well. Man is able to tolerate rapid and extensive alteration of barometric pressure. Except for the effect of gases in the viscera and the aural and sinal spaces and in solution in tissues, variation of pressure in the range of 0.11 atmospheres (50,000 feet altitude) to 16.1 atmospheres (500 feet diving depth) is without physiological effect, according to Behnke. Through social evolution man has learned to control the limitations imposed on him by pressure differentials and the effects of partial pressure, solution and evolution of gases in his body at various depths.

Curiosity led man to discover ways to take an air supply with him into the underwater world. As early as 900 B.C. he made attempts to develop such equipment. In 1943 Captain Jacques-Yves Cousteau invented the Aqua-Lung. This equipment is known as scuba, or self-contained underwater breathing apparatus. It consists of a tank or tanks containing air under pressure which delivers the air through a tube and mouthpiece to the swimmer at a pressure comparable to that of the aquatic depth he has obtained. In this state of his aquatic evolution the duration of his underwater exploration with this equipment was limited only by the physiology and physics which governed his being and the amount of air in the tank. It is now estimated that one quarter of a million people in America today use scuba gear.

To adapt himself to his new-found subaquatic existence man must understand and accept the limitations nature has placed on him. Man has few structural adaptations for an aquatic and subaquatic environment. Proper methods of breathing and intelligent use of the face mask, fins, snorkle, and scuba will allow him to adapt to the aquatic world. To survive in this new environment man must be in good general health and capable of standing up under emotional strain and physical duress.

Hazards

Poor structural adaptation for the subaquatic realm makes man susceptible to the potentially fatal hazards of arterial air embolism, decompression sickness, and drowning. Arterial air embolism may occur during rapid ascent of a scuba diver who, because of ignorance, panic, or unconsciousness, fails to exhale the expanding air in his lungs. The alveoli are likely to rupture and the air is forced into the pulmonary venous system; it then passes to the left ventricle and into the cerebral and coronary vessels blocking the circulation.

Decompression sickness, or bends, is due to the rapid release into the tissues and blood stream of nitrogen which has been dissolved with increased ambient pressure. The degree of nitrogen depends on the depth and duration of the dive. When coming out of solution the nitrogen forms bubbles which produce intravascular blockage or cellular distortions resulting in tissue anoxia and pain. Treatment for both of these conditions is recompression in a recompression chamber where the intra-arterial gas volume is reduced, thus permitting the resumption of normal blood flow.

Future Goals

In 1960 Walsh and Piccard descended to a depth of 37,800 feet in the bathyscape Trieste. With this feat man descended to the greatest known aquatic depth.

Man's aquatic evolution is being rapidly enhanced through the ingenious works of Cousteau.

This famed designer of the Aqua-Lung is now experimenting with colonizing the continental shelf with divers to determine the duration and depth men may be exposed to in the underwater realm (National Geographic, April 1964). He believes that undersea exploration is not an end in itself but must lead to scientific research, prospecting for wealth, and greater utilization of the oceans including human occupation of the sea floor for increasing periods of time. Cousteau is interested in making it possible for man to have undersea fish farms, just as he has cattle ranches on land. Economic reasons for this pursuit are the establishment of off shore wells of oil, natural gas, and liquid sulfur. Diamonds and manganese have been mined from the continental shelf.

Cousteau has outlined a long range plan for carrying out these experiments. He has set up various phases which he designated by the term Conshelf for the continental shelf. Conshelf One demonstrated in 1962 that two men could be housed in a 17 by 8 foot chamber in 33 feet of water at two atmospheres of pressure for one week. From here they descended to 85 feet to work. In 1963 five men were housed 36 feet below the Red Sea for one month living in a five room structure (Conshelf Two). Beneath them two men lived and worked in a cabin with two rooms at a depth of 90 feet with three and one-half atmospheres of pressure. The water temperature was 86 F. and the humidity inside the room was 100 per cent. From this cabin they worked at a depth of 165 feet and descended to 363 feet. The men were given a recirculating mixture of air and helium to breathe. Helium will allow divers to go deeper than with ordinary compressed air because it is lighter and causes less respiratory fatigue. After one week at this depth they breathed a mixture of 50 per cent oxygen and 50 per cent nitrogen for three and one-half hours to reduce the helium saturation in their bodies. They then ascended to the cabin above and decompressed in a mixture of 80 per cent oxygen and 20 per cent nitrogen.

Much of the research on the proper mixtures of gases for man to breathe at these aquatic depths was done by Capt. George F. Bond, Medical Corps, U. S. Navy, and his associates at the Medical Research Laboratory, U. S. Submarine Base, New London, Conn. The proper atmospheres of helium and oxygen were determined. It was discovered that monkeys could not survive a high pressure of air for more than 35 hours whereas an equivalent exposure to a selected synthetic breathing gas of helium and oxygen was tolerated for a period of two weeks without deterioration.

Conshelf Three will be undertaken in August 1964 when five men will attempt to live for two weeks in a 20 foot sphere at a depth of 165 feet. The divers will attempt to work regularly at 280 feet. Conshelf Four will be staged in May 1965. Five men will stay at 330 feet for two weeks and will attempt to dive to 525 feet. In August 1965, Conshelf Five is contemplated at the drop-off line of the Continental shelf, a depth of 590 feet. Later, dives to 900 feet will be attempted. Cousteau hopes eventually to send divers to 1,300 feet from an underwater station at a depth of 660 feet below the surface.

These manned stations allow man to work much longer and deeper than is possible with surface to surface dives. They do away with time-consuming decompression. By living underwater the divers do not need to decompress. They finish their work and then return to their underwater station. Decompression is necessary only when they make the final ascent after the prolonged stay. This entails the necessity for means of emergency decompression when needed. In the Conshelf experiments equipment was available to take a man immediately to the surface in a pressurized can and transfer him under pressure to a decompression chamber in a surface vessel.

Florida Fatalities

Man has made great strides in his aquatic evolution. He, however, must never forget that he is still a terrestrial being and his anatomy and physiology are not modified for an aquatic environment. When out of his normal sphere he must always be aware of the limitations nature has placed on him and not ignore the fundamental laws that regulate his being. When he fails to recognize these limitations, tragedy ensues.

In the period January 1960 through August 1962, a total of 36 deaths due to skin and scuba diving occurred in the state of Florida. Two thirds of these deaths occurred in cave diving. Fourteen of these 24 deaths could have been avoided had the divers had safety lines in proper use. Only one death occurred as a result of an attack by a shark. A much lower mortality is found in the well controlled yet more hazardous diving of the United States Navy. Only seven fatal accidents due to skin and scuba diving oc-

curred among its divers during the 15 year period from 1946 to 1962.

For man to survive in this new environment he should be well trained, in good physical condition, have proper equipment, and never dive alone.

Conclusion

Man has returned to the sea and is now mastering the world's earliest and yet last frontier. A social evolution through international cooperation has made these rapid advances possible. How is man's destiny yet to be fulfilled? Will his social evolution lead him into the blind alley of destruction as taken by the dinosaur or shall he live cooperatively with his fellow man in a peaceful, fascinating, and prosperous world of heretofore undreamed of possibilities?

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Medical Economics and Alternatives to Hospital Care

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There was never a time when medical treatment was exclusively a matter between a patient and a physician. At the very least, the patient's relatives or his neighbors were involved, sometimes to the discomfiture of the physician. But I doubt whether anyone in his wildest imagination could have predicted that the care of sick persons would one day involve and be of direct concern to so many individuals and groups of individuals or that there would one day be a body of knowledge known as medical economics.

Powerful developments of the past half century which accelerated this trend and which continue to drive it forward are: (1) Progress in scientific medicine, drug therapy and diagnosis; (2) Ratio of physicians to population practically unchanged; (3) Growth of speciality medicine; (4) Advancement in hospital design, construction and operation made necessary by certain applications of results of research in treatment; (5) Concern of management and labor with employee health; (6) Development of health insurance and prepayment plans; (7) Increasing role of government as purchaser of medical care; (8) A public increasingly conditioned to the belief that it is unwise to be sick outside a modern general hospital.

In parallel with these developments a steady rise in expenditures for medical care and in cost of medical care services noted by many in the early years of this century gave way about 20 years ago to a sharp upward swing both in total expenditures for and cost of care.

So striking was the upswing of expenditures for hospital care that medical care economics has today become almost synonymous with hospital economics. This notwithstanding the fact that the vast bulk of medical care is given outside of the hospital. During the last 20 years expenditures for hospital care have gone up so much that they now take about 28 or 29 cents of the health care dollar, a rise of 75 per cent over 1942 when they took 16 cents. These figures become even more significant when considered with the fact that personal health care expenditures as a per cent of the gross national product rose around 45 per cent in the same period (3.3 per cent in 1944-1945; 4.8 per cent in 1959-1960). Expense per patient day of hospital care rose from around $8 to $30.

Research in medical economics developed as a logical step in the search for controls and now constitutes a rapidly expanding field. Extensive studies proved that in the main large rises in expenditures for hospital care, utilization rates and per diem cost must be accepted as the price for more effective treatment than we have ever known. These increased expenditures are not only necessary but highly desirable. A significant portion of the rise, however, is believed to be unnecessary. Research discloses that hospital economics and hospital utilization respond for better or worse to the activities of physicians, hospital authorities, private insurance companies, the Blues, management, labor, government and the public.

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Unfavorable Factors

The factors which are said to promote improper hospital use may be divided into three groups. The first group includes practices of physicians, hospital authorities, private insurance and all the rest of the "principles," which, though not in themselves improper, lead to unnecessary hospital admissions, excessive use of hospital services and excessive length of stay. These factors are still being studied, but their identification has suggested certain controlling measures which have assumed a degree of respectability.

Controlling hospital use by limiting hospital bed supply is seen at work in the organization of area hospital planning councils. These councils attempt to prevent unnecessary hospitalization due to oversupply of beds. They must determine whether high occupancy means need for more beds or need for more controls on utilization.

The Florida Commission on Cost of Medical Care reported in May 1963 that "there appears to be a trend toward an increasing degree of unnecessary utilization of hospital health care facilities." The implication is clear in the recommendations of the Commission. Medical staff utilization committees are being organized in some hospitals in most states to influence hospital use by physicians. The supply of doctors and their professional characteristics also bear significantly on patterns of hospital use.

Management and labor are studying and restudying their health care plans in a search for controls on hospital use and cost which might be due to the kind of employee benefits in labor-management contracts. The New York Labor-Management Council on Health and Welfare Plans was organized for this purpose in 1962.

Government, local, state and federal, is looking at the price it must pay for hospital care of the indigent today. Seeking ways of keeping the lid on costs, it turns to reimbursement formulas and ceilings.

The health insurance industry is offering new plans providing deductible and co-insurance features, reimbursement formulas and limited indemnities not only to control premium costs and replication of coverage but also to encourage the insured to take care of less costly illness himself. In addition, the industry in cooperation with labor and management is offering group practice incentives and increased use of outpatient care with the notion that these measures will prove effective. This is now being debated by researchers from available data.

Regarding public demand as a factor in hospital care costs, vigorous efforts are being made to educate the policyholder to the bad effect of over-utilization of hospitals; but the futility of appealing to the public on moral grounds is already evident.

A second group of factors said to contribute to the undesirable part of the rise in health care expenditures is uniquely social and the product of a changing society in which the three generation family has almost vanished and working mothers and grandmothers are common. Homes are of small size and neighbors are no longer as neighborly. Hospital care has become part of the way of life. I could find little accurate information about the degree to which this group of factors influences utilization. But it is evident how these factors, to which we are all victim, can result in improper use if we are agreed that the general hospital caring for acute illness should not also serve as a custodial care center, a convalescent home, or a nursery.

A third group of factors which influences hospital use unfavorably and which is now beginning to receive attention operates like a deficiency disease. One might describe it simply as a lack of organized systems of providing adequate health services for both the acutely ill and the long term sick outside of the hospital, that is, suitable alternatives to hospital care for those who need definitive bedside care but not general hospital care. The resultant use of general hospital beds stems from failure of all persons concerned to perceive these as factors causing improper utilization.

Home Care Program

Uncoordinated community services exist, but a coordinated home care program under top level supervision does not exist in Florida and in but a few demonstration areas in the nation. Coordinated home care should include visiting nurse, home aide, physical therapy and laboratory services plus drugs, sick room equipment and supplies. A number of prepayment and health insurance plans have undertaken to provide such service benefits.

One Blue Cross Plan reports the prevention of many unnecessary hospital admissions although no effect on utilization rates from the addition of outpatient service benefits.

Michigan Blue Cross experience so far indicates that "a sound program of home care can

be provided under prepayment . . . not only without added cost to members but, hopefully, with some overall savings in payments to hospitals. . . ." "After making proper allowance for the probability that the hospital bed vacated by a home care patient will be filled by another Blue Cross patient, the plan still comes out even." "Actually," said the plan director, "our estimates are so conservative we are reasonably sure we make an overall saving." He goes even further to say "Our hopes for cost control . . . lie chiefly in the expansion of home care. . . ."

There is growing sentiment among medical economists that a well conceived home care program financed through prepayment could make unnecessary a great deal of the construction of new general hospital beds. Last year I visited a city in Michigan, where a home care program had been in operation for about two years. Not only were doctors and patients satisfied with the service but the administrator of the cooperating hospital told me he was experiencing an unexplained drop in occupancy in a community where a new hospital construction program had been planned.

Associated Hospital Service of New York added home care as a benefit provision a few years ago. In March of this year I was informed that earlier estimates of the controlling effect of home care on hospital use were holding true.

Among hospital-based home care programs, two plans, one conducted by the Medical Care Research Center of Washington University at the Jewish Hospital of St. Louis and the other by the Montefiore Hospital of New York, have been in operation over 10 years. Both plans are now considered to be an integral part of their operation serving to control and conserve hospital resources by providing high quality extramural care.

Role of the Physician

Moderate expressions of concern about hospital use have been voiced for decades implicating the physician mainly. Today these have assumed a "condition red" aspect typified by a group of articles co-authored by Mr. Horace Cotton which appeared in Medical Economics June 19, 1961, under the heading "The Hospital Cost Crisis." The first is subtitled "It Can Cost You Your Freedom."

Reviewing the literature on hospital economics and the proceedings of various national meetings on hospital utilization, one is impressed by the fact that the reputation of physicians is as much at risk on this issue as on any other.

The physician cannot take much comfort from the fact that researchers showed how all "principles" in health care contribute in some degree to inefficient hospital use and rising expenditures. Somehow in this "whodunit" he emerges from almost every one of such inquests as the villain in the piece. The reason his slip shows probably is because he usually works alone and he works on the front line. Perhaps he can take comfort in Luke VI, 26, "Woe unto you, when all men shall speak well of you!"

One of our county societies indicating the critical need for hospital beds in the community recently berated its members editorially about improper use of hospital beds, overstay, unnecessary admission. In the same week a local hospital released to the press information about a new type of luxury hospital accommodation. The reporter described it to the public in terms normally used by our very best innkeepers to attract patronage. "Patients just love the two rooms," said the hospital administrator. "There already is a waiting list for them," he added, "and we plan to build up to 20 of the luxury rooms."

This is not an exercise in demagoguery. My object is not to blame the hospital for bed shortages but to illustrate that some hospital administrations have goals which are sometimes at odds with what is considered good medical economics although they may represent good hospital economics.

Labor, the insurance industry, government also have different goals.

The average man looks to the hospital as a place to go during illness because he has been sold on it as a hostel where medical personnel and machines restore health and because he believes he has paid the price of admission or knows someone will. But I insist that he goes and stays there some of the time because he and his physician lack alternatives which can in any way approach the coordinated system of manpower and services to be found in the hospital.

Home nursing care has already been endorsed by the Florida Medical Association. Home care is among the benefits authorized by the federal Kerr-Mills Act. But only one element of home care, visiting nurse care, is provided by Florida's Medical Assistance for the Aged and by our Blue Cross Senior Citizens contract. The service is practically unused. Rejection of this service by the physician and the patient could have been anticipated just as surely as the rejection of a

hospital which provided nursing care but no food service, no drug service and no laboratory service. Yet for growing numbers of the chronically ill and aged coordinated home care offers the greatest promise for high quality, efficient, lower cost medical care.

I think it reasonable to say that hospital use can be controlled by measures now advocated but not if these measures focus only on the hospital. To the extent possible we must individually and as an organized group maintain our interest in the activities of government, labor and management, hospital boards and insurance programs which cause improper use of hospitals. But we cannot neglect any opportunity to put into practice plans over which we may exercise more direct supervision at the local level and which offer reasonable solutions to the problem of medical care cost.

More study of prepaid outpatient service for the ambulatory sick is needed. I am convinced that coordinated home care services, for the sick who must have a bed, organized and operated under continuing highly competent supervision deserve our immediate attention. What I suggest is not a return to horse and buggy medicine but a step forward into an additional way of medical care suited to our modern system of private practice which can take its place along side of hospital care.

In the face of excessively high occupancy rates and waiting lists for admission to the hospital in many areas, serious consideration should be given to the establishment of a coordinated "out-of-hospital" medical care program on a sound financial basis. Certainly to plan for the construction of added hospital beds (not the replacement of outmoded facilities) without due consideration to the need for alternatives to general hospital care is simply bad medical economics.

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The Urological Aspects of Pyelonephritis

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The two most important urological aspects of pyelonephritis are stasis due to obstruction and ureteral reflux. There are four modes of entry by which bacteria may obtain access to the kidney: hematogenous; urogenous, that is by direct ascent up the ureter; periureteral lymphatics; and direct extension from the perirenal tissues. It has been my experience that the first two are by far the most important.

Etiology

The common infecting organisms are: Escherichia coli, Aerobacter aerogenes, Streptococcus faecalis, Staphylococcus aureus, Bacillus proteus and Pseudomonas. The most common of these is E. coli; however, mixed infections are not unusual. Many of these bacteria have the ability to split urea into ammonia and thus create recurring urinary calculi. Bacillus proteus is the worst offender. It has been demonstrated in the laboratory that gram-negative bacteria such as E. coli and B. proteus injected intravenously into rabbits and rats will not produce pyelonephritis in the normal kidney, but will infect the kidney which has previously undergone partial ureteral obstruction. The exception is coagulase-positive Staphylococcus which has the ability to create pyelonephritis without the presence of obstruction and thus renders the scarred kidney susceptible to further attacks of pyelonephritis due to gram-negative bacteremia.

Schlegel stated: "Obstructive uropathy greatly enhances the susceptibility to infection and prevents its eradication and such would have to be relieved before any specific antibiotic or chemotherapeutic approach could be expected to eradicate this infection. When an impassable stone or tumor is causing obstruction, it must be removed or by-passed regardless of whether infection is present or not. The presence of infection merely compounds the situation and makes the removal of the obstruction a matter of emergency."

Davis stated: "If persistent infection occurs in the urinary tract it will usually mean urinary stasis due to obstruction to the normal urinary flow. All changes produced are reversible in the early stages and irreversible in the late stages. It is therefore the duty of the physician to learn to

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detect the obstruction in its early stages and relieve it before irreparable damage is done." O'Conor reported that in his experience more than 75 per cent of patients with recurrent or persistent urinary tract infection have an obstructive lesion, a neoplasm or calculi.

The common obstructing lesions producing urinary tract infection are:

Kidney
1. Renal calculus
2. Adenocarcinoma of the kidney
3. Transitional cell carcinoma of the kidney
4. Ureteropelvic obstruction.

Ureter
1. Ureteral calculus, tumor or stricture
2. Megaloureter
3. Ureterocele
4. Ureteral reflux.

Bladder
1. Neurogenic bladder
2. Hypertrophy of the vesical neck
3. Vesical calculus or tumor
4. Vesical diverticulum.

Prostate
1. Hyperplasia of the prostate gland
2. Carcinoma
3. Prostatitis.

Urethra
1. Urethral valves
2. Urethral stenosis or stricture
3. Stenosis of the external urinary meatus
4. Urethral carcinoma.

The most common urinary tract disease is urethrocystitis, which predominantly occurs in females, probably because of the short female urethra and the contamination of the external urethral meatus by vaginal and fecal flora. This is especially evident in infancy. The bacteria in cystitis frequently migrate to the kidney by vesicoureteral reflux and often the inflammation and edema of cystitis will decompensate a marginally competent intravesical ureter and produce ureteral reflux.

Unless vesicoureteral reflux is considered an etiological factor in all cases of urinary tract infection, this serious pathological condition may go undetected. Since it is possible for this condition to exist in the presence of normal intravenous pyelograms, retrograde pyelograms, and cystoscopy, it may be present only when an acute attack is encountered and therefore missed on voiding cystogram when the patient is well. Cinefluoroscopy has demonstrated reflux in over 50 per cent of children with recurring urinary tract infection. Hanley and Williams observed reflux in women during an attack of acute cystitis, but when these patients were re-examined after the infection had responded, frequently the reflux could not be demonstrated.

Diagnosis

Every patient with an attack of urinary tract infection should have the following diagnostic procedures: urinalysis and gram stain, urine culture and sensitivity with colony count, complete blood count, fasting blood urea nitrogen and blood sugar determinations, vaginal smear for trichomonas and monilia, prostatic smear for white blood cells and trichomonas, intravenous pyelogram, and voiding cystogram or voiding cinecystourethrogram in all children. Extensive procedures that may be indicated in chronic or recurring urinary tract infections are: urine cultures for tuberculosis, cystoscopy, retrograde pyelograms, nephrotomagrams, voiding cystograms in adults, renal scan, renogram, and aortogram. The procedures necessary in the follow-up of patients with urinary tract infection are: repeat urinalysis and gram stain, urine culture, colony count, and cystograms as indicated. Hanley stated that in a review of 44 women who had had a previous attack of urinary tract infection and thought they were perfectly fit at the time of examination, 43 per cent had serious renal changes as a sequela of acute pyelonephritis which had occurred 17 to 25 years before.

Treatment

A few basic principles to be observed in the treatment of acute pyelonephritis are:

1. The forcing of liquids. The principle behind this consists of enough urine formed to flush out the bacteria at frequent intervals before they have a chance to multiply in large quantities. Zinner and Paquin demonstrated that hydration reduces the incidence of demonstrable reflux, probably because of the force and greater mass of the descending bolus of urine which opposes regurgitant flow. It is recommended that the urinary output be approximately 2,500 cc. or enough to facilitate voiding every two to three hours, day and night.

2. Preferred antibiotics for the specific organisms when the patient is seriously ill are:

E. coli—Nalidixic acid or colistin

Aerobacter — Colistin, chloramphenical (Chloromycetin) or Nalidixic acid.

Proteus—Nalidixic acid or kanamycin
Pseudomonas—Colistin
Streptococcous faecalis — penicillin or streptomycin
Staphylococcus—sodium oxacillin (Prostaphlin) or erythromycin.

Academically it is advisable to eradicate the infection in acute pyelonephritis completely if at all possible.

3. In the long term treatment of resolving acute pyelonephritis or chronic pyelonephritis, the low grade medications are preferred. These consist of sulfonamides or nitrofurantion (Furadantin) and a combination of methenamine mandelate (Mandelamine) and methionine. The principle of long term treatment is to keep the urine bacteria-free and not to produce sufficient blood concentration to destroy the bacteria in the interstitial cells. These drugs are meant to accomplish the prevention of reinfection and flare-ups while the kidney heals itself by natural processes. This treatment may be necessary for weeks, months or even years as indicated by follow-up cultures and colony counts.

Summary

Once pyelonephritis invades a kidney and this low grade inflammation is allowed to be harbored there for a long period of time, incurable and irreparable damage may occur. Actually enough delicate kidney tissue may be destroyed to produce uremia and death. From the time of the initial invasion and these moribund processes, the only recognizable symptoms may be just an occasional flare-up of acute urinary tract infection. This theory is of importance so that a correlation between the chronic state and these flare-ups may be established, rather than erroneously attributing each attack of acute pyelonephritis to an independent infection. It is important that these acute flare-ups be treated over a long length of time, not separately in short series. A close relationship should exist between the urologist and other physicians treating this condition. All obstructive etiological factors should be diagnosed and treated as indicated. The error should be in overtreatment and overzealous approach in diagnosis and management. The mistake is in giving the patient a few pills when he has an attack of acute pyelonephritis and not proceeding with the necessary examinations and follow-up therapy.

Bibliography

Davis, D. M.: Mechanisms of Urologic Disease, Philadelphia, W. B. Saunders Company, 1957.

David, J. H.; Rosenblum, J. M.; Quilligan, E. J., and Persky, L.: Evaluation of Post-Catheterization Prophylactic Chemotherapy, J. Urol. 82:613-616 (Nov.) 1959.

Hanley, H. G.: Pyelonephritis and Ascending Infection From Lower Urinary Tract, J Urol. 91:1-4 (Jan.) 1964.

Hutch, J. A.; Miller, E R., and Hinman, F. Jr.: Perpetuation of Infection in Unobstructed Urinary Tracts by Vesicoureteral Reflux, J Urol. 90:88-91 (July) 1963.

Hutch, J. A.: The Role of the Ureterovesical Junction in the Natural History of Pyelonephritis, J. Urol 88:354-362 (Sept.) 1962.

Kass, E. H.: Bacteriuria and the Pathogenesis of Pyelonephritis, Lab. Invest. 9:110-116 (Jan.-Feb.) 1960.

Mahoney, S. A, and Persky, L.: Observations on Experimental Ascending Pyelonephritis in the Rat, J. Urol. 89:779-783 (June) 1963.

O'Conor, V. J.: Urinary Antiseptics; Past and Present; Fact and Fancy, Proc. Inst. Med. Chicago, 19:187-199 (Dec. 15) 1952.

Schlegel, J U.: Pyelonephritis, J. Urol. 86:12-16 (July) 1961.

Sharp, R. F.: Hydronephrosis: Development of Present Concept of Management, J. Urol. 85:206-210 (Mar.) 1961.

Sommer, J. L.: Experimental Pyelonephritis in the Rat with Observations on Ureteral Reflux, J. Urol. 86:375-381 (Oct.) 1961.

Talbot, H. S: The Role of the Ureter in the Pathogenesis of Ascending Pyelonephritis, J. A. M. A. 168:1595-1603 (Nov. 22) 1958.

Zinner, N. R., and Paquin, A. J. Jr.: Clinical Urodynamics; 1. Studies of Intravesical Pressure in Normal Human Female Subjects, J. Urol. 90:719-730 (Dec.) 1963.

710 Lomax Street.

Florida Chapter American College of Surgeons

Years ago, it became evident that if the American College of Surgeons was to exert its maximum influence in all communities, this could not be done by the central office alone. The Chapter idea became the answer and has proved its value beyond question.

The organizational meeting of the Florida Chapter of the American College was held on April 26, 1953. Walter C. Jones of Miami, a Governor of the College, acted as temporary chairman and David R. Murphey Jr. of Tampa acted as a temporary secretary. The following officers were elected at the initial meeting: Frederick J. Waas, President; Joseph Stuart, Vice President; and Dr. Murphey, Secretary-Treasurer. The first Councilors were Walter C. Payne, Frederick H. Bowen, Francis H. Langley, and Bailey B. Sory Jr.

The Florida Chapter has grown from its original 142 members to 475 members of whom 255 are general surgeons and 220 are among the surgical specialties.

The organization meets annually in conjunction with the Florida Medical Association at which time both scientific and business sessions are conducted.

Among the objectives of the American College of Surgeons and its Chapters are:

1. Elevation of the standards of surgery.
2. The establishment of a standard of competency and of character for practitioners of surgery.
3. Education of the public and profession to understand that the practice of surgery calls for special training.

The College encourages imagination, ingenuity and pioneering among its Chapters. The Florida Chapter has numerous projects tailored to our state needs. Our Chapter's influence on young surgeons in developing surgical conscience that always places the interest of his patient before his own has been among the most rewarding.

The American College of Surgeons has been referred to by responsible observers as the conscience of American surgery. The Florida Chapter has within its power the opportunity of helping the College deserve that approbation.

Charles Larsen Jr., M.D.
President, Florida Chapter
American College of Surgeons

President's Page

Tangible Benefits

Soon after my election as Secretary-Treasurer of the Florida Medical Association in 1951 my thoughts turned to the benefits a member received from belonging to our organization. The Association did serve as an effective voice for its membership in dealing with Blue Shield, commercial insurance, government and others, but this service was hardly enough. Other than that, there were many intangibles, but the tangible benefits were too few and I set about trying to do something about them.

About that time we were threatened with a marked increase in professional liability rates. We protested the increase and requested our first hearing before the insurance commissioner. Doctors converged from all Florida; neophytes all, but dead serious and sincere. We were able to delay the increase in rates for one year. When an increase was granted, it was less than that requested by the insurors. A similar but less successful pattern has been followed on three occasions since then.

This experience emphasized the lack of interest on the part of most insurance companies in writing this particular type coverage as well as exercising responsibility and leadership in preventing malpractice claims, in discouraging unjustified settlements, in keeping statistics on Florida malpractice claims and in attempting to coordinate legal services so that a few attorneys could become especially adept at defending these claims. Malpractice insurance was a hodgepodge and remains so today. Attempts were made to solve these and other problems through the insurance agents, but no one was able to speak for the insurance companies.

Better insurance protection was something tangible that could be offered our members. I set about attempting to educate the doctors of Florida on the causes of malpractice through presentations at sectional and county meetings and through our Journal. Interest was generated immediately. An insurance committee was formed. Aided materially by Chairman Dr. Bob Zellner and his committee, we undertook the job of securing group professional liability coverage. We brought Mr. H. F. Wanvig, the insurance representative of New York State's group plan, to Florida for consultation when we learned he was the most knowledgeable man in the country on the subject. He gave us excellent advice, but was discouraging to our hopes of finding an insurance carrier to underwrite us. Even with his help we were not able to find an underwriter. We were urged by some physicians to establish our own. I visited Denver to investigate Colorado's plan which was in initial stages, and which has been successful. We decided not to undertake self insurance.

Not to be daunted, we followed the lead of the American College of Surgeons and sought Health and Accident coverage. This was offered immediately by Charles O. Finley, Marsh and McLennan, Inc., and others who made presentations to our committee. We made rigid requirements and Marsh and McLennan, Inc., met them best. Our F.M.A. Plan was made available to our membership and although it was better than any plan in effect, it was bought by less than 500 members—not enough for true group coverage. Even so, most of the advantages of the plan were retained, but the company maintained the right of SELECTIVE underwriting. All of our members could not benefit fully because too few were interested. We ran into fierce competition from local insurance agents and a ground swell of specialty group coverage. Through the years other related insurance has been added to the original plan so that it is still among the best offered, but somehow Marsh and McLennan have proved to be better insurance counselors than salesmen, and we officers and others have fallen down in helping them sell it. No plan with which I am familiar has the personal and expert services that have been rendered by our carriers. This has resulted in unusual benefits for many of our members who became ill or injured.

Mr. Leyton Hunter, our friend and prime advisor with Marsh and McLennan, continued to search for a carrier to work with us on group Professional Liability insurance for F.M.A. members. A few years ago he left Marsh and McLennan to head his own office (The London Agency) in Atlanta, but he continued his search. In 1961 he excitedly notified us he had found a company which showed interest. One of our requirements was that the underwriter be a strong, reliable insurance company. One of the companies of Employers Group of Boston accepted our strenuous specifications, with Marsh and McLennan continuing to act as our agents.

Although the liability problem continued to be an increasing threat to doctors in Florida, our Association plan was not supported as we had hoped, so that AGAIN we were unable to get certain GROUP BENEFITS. The number covered is not adequate for SIGNIFICANT statistical studies which can be most important to us. Nevertheless, they have help materially in discouraging nuisance suits.

The premiums are 15% less than those of competitors; the benefits are given expert and personal considerations. One of two top Florida legal firms is used to coordinate the defense of all cases and consideration will be given to relationship between local physicians and local attorneys. Expert consultations are given without charge by selected physicians before disposition of cases is advised. Recently, in an attempt to increase sales, provisions were made to award part of the premium as commission to local insurance agents who handled this business for the physician. Much has been done to make it the best, yet only 755 physicians (less than 12% of our membership) participate. This is not enough to give adequate spread of risks and the company is finding the costs of the program unduly high.

Unless better participation is forthcoming in the next year, our opportunity to help ourselves may be lost. No insurance company can be expected to take as much interest in problems peculiar to doctors as doctors themselves. I am convinced that a program of insurance coverage of doctors professional liability cannot achieve maximal results without active participation of doctors themselves. We have the opportunity by participating in our own program to have a voice in the kind of insurance coverage which is available to us. It is unlikely we will get the second chance although this represents one important way of truly meeting the ever mounting problems in professional liability insurance coverage.

The efforts have been made. It is up to you, doctor, at least to look into the advantages of our Association's tangible benefits and utilize them if you can.

Sam Day

The Role of Commitment in the Treatment of the Alcoholic

Historically, society's response to the alcoholic —its primitive attempt to help, or "treat" him— was to commit him to an alcohol-free environment— the jail. Obviously, this has been a historic failure. Over the past three decades, with the work of Alcoholics Anonymous, the advanced thinking of a small but increasing number of physicians and behavioral scientists, the official recognition by the American Medical Association of alcoholism as a disease, and the creation of special treatment services such as Florida's Alcoholic Rehabilitation Program, the tendency has been in quite the opposite direction. There has been an emphasis—even an insistence—on voluntary treatment. In his article on page 100 Judge Rehrer is suggesting that the time is ripe to reverse this trend.

There is much to be said both for and against involuntary treatment. On one hand, voluntary patients, with a conscious wish to cooperate in their own treatment, have provided the case material on which much that is known about the treatment of alcoholism was learned. Experience thus far, including that of states which have involuntary treatment programs, also suggests that the percentage of patients who respond favorably to a comparable expenditure of treatment manpower is considerably smaller among involuntary patients. On the other hand is the fact that a vast number of alcoholics never enter into any type of voluntary help, but pursue the suicidal course of their disease to its ultimate outcome. This group includes many people who would otherwise have much to contribute to the world. There is also some evidence that voluntary programs secure some of their greater recovery rate from a segment of their patients who might recover without such intensive treatment; if this is the case, and if these patients could be accurately identified before treatment, then the higher recovery rate of the voluntary programs would represent an expensive artifact, rather than an argument in favor of voluntary treatment.

A bill creating an involuntary commitment of alcoholics, on the order of that described in Judge Rehrer's paper, was introduced in the 1963 session of the Florida legislature, but failed to pass. Three of the reasons stated for opposition were: (1) fear that a commitment law affecting only part of the state, while obviously advantageous for research and demonstration purposes, might prove unconstitutional, (2) apprehension that the safeguards against unwarranted commitment were inadequate, and (3) the high regard of members of the legislature for the opinion of a handful of dedicated men, recovered alcoholics themselves, who on many occasions have been the only lobbyists for any type of provision of treatment for alcoholics, and who on this occasion opposed involuntary commitment. Their objections were sincere and based on conviction arising out of personal experience. Nevertheless they may have been less than objective. Some of these same men have supported an alternative arrangement in which treatment would be offered in jails to those convicted of offenses related to their alcoholic drinking.

Some similar bill will undoubtedly be introduced in 1965—and ultimately an involuntary treatment program of some sort will be provided. In my opinion, this is as it should be, for professional personnel experienced in working with alcoholics are prepared now, in knowledge and conviction, to work with involuntary patients, for they now realize that creating motivation for treatment is really a major part of treatment itself. In many cases the only difference such a law would make would be to see a man committed to a more

appropriate treatment—for under present law, many alcoholics are committed to our state hospitals, under other and incomplete diagnoses, and are thus committed to institutions which can make no provision for the special problems and special opportunities involved in treating alcoholism. When it does come, let the law be written wisely, for one of the major hazards of any such law is that it may merely create another dumping ground, solving part of society's problem by removing a relative few alcoholics from circulation, but so swamping the treatment facility as to demoralize its staff and prevent any attempt at active treatment.

C. Brooks Henderson, M.D.
Ocala

History and Development of the Association of Retired Doctors of Medicine of Broward County, Florida, Inc.

To the best of our knowledge, our Association of Retired Doctors of Medicine of Broward County, Florida, Inc., is the only organization of its kind in the United States. We believe the history and development of this organization should be of interest to our retired colleagues in other areas and to the profession as a whole.

In the past, physicians frowned upon the idea of retirement. It was more or less their credo to remain in the harness and to die with their boots on. What seemed good for them they also preached to their patients, with varying success.

In our rapidly changing world, however, with its new tempo of life, early retirement gradually became more or less accepted. Healthy active persons in almost every walk of life, including the physician, either retired voluntarily or were retired for various reasons such as age, company requirements, illness or personal factors. A concept which also developed was that elderly persons should make way for their younger and more vigorous confreres.

In this respect it may be that the pendulum swung too far. Already institutions of learning, industry and big business are taking a second look at this perplexing question. It has become apparent that too many persons who have much to offer are being relegated too hastily to the ranks of retired people.

Much has been written on the problems associated with retirement, but relatively little has been said about the subject as it may affect the physician. Perhaps the physician interested himself in the welfare of others and failed to give sufficient attention to his own periphery in this regard. It would be interesting to know just what happens to the physician once he has made this challenging change in his life's work. Why did he retire? What is he doing? These and other questions should be at least of passing interest to our colleagues, both old and young.

It was not long after coming to Broward County, Florida, that we learned that almost 100 retired physicians had chosen this clement climate for their new homes. The American Medical Association says that as of 1963 there were about 10,290 retired doctors in the United States, and that of these 1,038 were living in Florida. In view of the fact that so many retired physicians resided in the county, one of us (Dr. Rice) suggested that we try to form an association of retired medical men in our area. This has been accomplished, but not without considerable work.

At the outset a small group* of us held many informal meetings. The Broward County Medical Society and its officers helped us and encouraged us in our efforts. They aided us in finding all the retired physicians in Broward County of whom we or they had information. We invited our colleagues to meet with us and to discuss the formation of an association. Considering that most of these men and women were unknown to one another, it was heartening to have so many respond and show a real interest in our project.

Our early gatherings during 1958 were mainly social and exploratory. Although most of our confreres had acquired mellow temperaments with advancing age and had sobered with years of retirement, it was obvious that many differences of opinion could be expected, not so much about the

*Drs. Rice, Enlows, Zinn, Goddard, Herman, Douglas, Shillington and Moersch.

formation of an association as about the purpose, value and goal of such a group. Some of the men had come to Florida to retire, and wished simply to live their lives quietly and undisturbed among a small circle of friends. But others wanted to plunge immediately into an extravagant building program, visualizing the rise of handsome quarters for a colony of retired medical men. In the course of time and after many discussions we became better acquainted, and both major and minor differences of opinion were fairly well resolved. It was agreed that the group should be organized very conservatively and that expansion should be left to the future.

On December 7, 1959, the first official meeting was held. Then luncheon meetings were held monthly until the following May. At these gatherings considerable time was devoted to organizational matters and various plans for future activities of the association. Unfortunately, these early meetings were not always very inspiring, and after what had been an excellent start the attendance declined and a few members resigned. Those who were critical said that we had too little to offer and that we lacked any special or worthwhile goal. We hope that as the association proves itself these persons will reconsider their action and lend their support to our efforts.

The year 1961-1962 was more successful. The members soon found mutual interests and acquaintanceships developed into friendships. Much enthusiasm and willingness to assist on any task presented were displayed. On January 20, 1961, a revised constitution and by-laws were adopted. At the same time the association was incorporated as a nonprofit organization and a state charter was obtained. In this year, with the enthusiastic aid of our wives, a bridge club was organized and was a great success. It was another step in improving our friendly and more intimate relationship between the members.

Our progress during the past two years has proven to be most gratifying. The meetings have been well attended. The members have become better acquainted and they have enjoyed the social hour which precedes a meeting. The program committee has done an admirable piece of work and as a result we have been privileged to hear excellent talks by prominent speakers, in the fields of sociology, economics, psychiatry, surgery, public health, politics and so on.

According to our constitution, the purpose of the Association of Retired Doctors of Medicine of Broward County, Florida, Inc., is to bring together the retired physicians for the purpose of mutual understanding, good fellowship and fraternal assistance. The officers are a president, vice president, secretary and treasurer. The board of directors has three members. Important in the functioning of the association are its various committees such as those concerned with programs, visiting, social events, projects and so on. Luncheon meetings, preceded by a social hour, are held once a month, from November first to May first. Thus far we have had no regular meetings during the summer months, but we are looking forward to the establishment of a summer program.

That the aims of our association are not entirely selfish is evidenced by our interest in civic, church and club affairs. The possibility of doing some part time medical work has been realized by several of our members. Voluntary work in state institutions, veterans hospitals and public health facilities is a possibility to be explored.

We believe that retired physicians by no means need to be considered fallen timber or forgotten souls in a foreign land. Our hope is that the golden years are not a myth but something to contemplate with some degree of pleasure. For years our younger confreres of the Broward County Medical Society have invited us to an annual dinner. They have extended to us many courtesies and in turn we stand ready to be of any service to them that is within our power. This past year we have taken part in the polio program in Broward County, and will assist in the local Health Fair in November. Our association serves as a common meeting ground, and has tended to unite us in a common effort. We have gained a feeling of belonging to an organization which is no discredit to our adopted home. The loneliness which once pervaded retirement has been replaced by a sense of accomplishment of which we are justly proud.

In summary, it has been our experience that most retired physicians, at least in our area, are willing and anxious to identify themselves with an association such as ours. We have gained a conviction that we are contributing something worth while to the community. It has been a pleasing experience to see how acquaintanceships have matured into real friendships. At first some of the members displayed a mild reluctance to accept any responsibility within a group. This situation has changed, and in the past two years nearly everyone who has been asked to carry out

some task has accepted with willingness. In these trying times of our country's history, pessimism is widespread. Our moral support of one another, especially in the event of illness or grief, is simply another of the intangible benefits which we derive from our close companionship. In these years of development we have received many welcome suggestions from our members concerning the inauguration of added medical, social and business activities. We have moved slowly and we quite understand that there is much work ahead to be done. We do believe that our accomplishments to date have justified our being and may inspire retired physicians in other areas to unite for their common good.

EARL RICE, M.D.,
AND FREDERICK P. MOERSCH, M.D.
FORT LAUDERDALE

Management of Nasal Fracture

Many minor nasal fractures are overlooked or appear to be trivial at the time of the injury, so that little or no correction seems to be indicated. The full extent of the injury may not be determined because of hemorrhage and edema of the nose. In some quarters nasal trauma is so lightly regarded that blind manipulation of the nasal bones is considered adequate for many fractures, not knowing the complications and sequelae which may develop at a later date. These complications usually are: Nasal obstruction; sinusitis due to mechanical obstruction; adhesion between the mucous membranes of the nose; and deformity of the nose and septal cartilage, which produces a facial abnormality that could lead to emotional problems.

Careful examination of the external and internal nasal components will result in a more complete diagnosis, prompt treatment, and, consequently, better surgical reduction and cosmetic result. X-ray is helpful in the diagnosis of nasal injury, but it should not be the only method employed. Oftentimes the cartilages and small bones may be fractured, and would not necessarily show in the picture because of complex bony structures in this area.

In some instances nasal trauma must await the correction of graver condition of injury. Reduction should be accomplished at the time when the surgeon has as many factors in his favor as possible. It may be necessary to arrest hemorrhage, incise hematoma, repair soft tissue damage, and then wait for the edema to subside so that palpation and visualization will be efficient at the time of surgery. If the fracture is an extensive one, with marked deformity of the nose, then a modified or complete rhinoplasty is necessary to correct the defects, restore the physiological function of the nose and, at the same time, prevent psychological disturbance resulting from facial abnormality, which may develop in some patients.

The propagation of the mistaken concept that the reduction of nasal fractures must be immediately accomplished has led to the popularity of the blind manipulation method by physicians when faced with recent nasal trauma with its usual accompaniment of hemorrhage and edema. No other procedure can be performed immediately, other than to attempt some rearrangement by thrusting forceps into the nostrils. The result of such procedure is dissatisfying to physician and patient in a large percentage of cases.

WILLIAM CHEW, M.D.
LEESBURG

FLORIDA MEDICAL ASSOCIATION
ORGANIZED 1874

Association News

Informational Conference Workmen's Compensation Program

An informational conference jointly sponsored by the Associated Industries of Florida, Florida Medical Association, and Duval County Medical Society was held on April 15, 1964, at 7:00 p.m., in the Robert Meyer Hotel, Jacksonville for the purpose of explaining to interested physicians and insurance carrier personnel and others the workings and procedures of the Workmen's Compensation program.

Those present representing the medical profession, industry, insurance, and the Florida Industrial Commission were:

Samuel M. Day, M.D., Florida Medical Association
A. MacKenzie Manson, M.D., Duval County Medical Society
Emmet F. Ferguson Jr., M.D., Florida Medical Association
Henry L. Harrell, M.D., Florida Medical Association
Thomas J. Bixler, M.D., Medical Consultant to the Florida Industrial Commission
Honorable A. Worley Brown, Chairman, Florida Industrial Commission

Mr. Jimmy Herbert, Assistant Director, Workmen's Compensation Division
Mr. Jack Lee, Executive Vice President, Associated Industries of Florida
Mr. Franklin Gardner, Acting Director, Workmen's Compensation Division

In addition to these scheduled speakers, 94 others including 29 physicians were in attendance and participated in the question-and-answer discussion period.

Introductory remarks were presented by Drs. Day and Manson, and Mr. Lee, all of whom emphasized the importance and desirability of joint meetings such as this one in attaining mutual understanding on the part of all parties concerned with Workmen's Compensation. Appreciation was expressed to the committees, both medical and insurance, which had worked to develop the Workmen's Compensation program.

Mr. Brown gave a brief summary of the events leading to the present program. He explained that when the final agreement was reached, there were necessarily some things which the medical profession wanted over what was granted and some things industry wanted over what was granted. When in October 1963 the medical fee schedule was adopted, based on the recommendations of the committee, it was recognized there would be problems that would need to be worked out. It was recognized that an educational program was in order, which would spell out in detail the procedures involved. He explained the purpose of the Medical Consultant, Dr. Bixler, and the Medical Advisory Committee. For preliminary information for questions, Mr. Brown discussed the procedures for claims processing. He prefaced his remarks by first mentioning the "green book" in the hands of the medical profession contained only code numbers and listing of procedures and does not show conversion factors. This was done in keeping with the recommendations of the representatives of the medical profession.

He explained the method of submitting a claim as follows: When a bill is submitted, the bill should be based on the normal charge for a given procedure. In the event the charge is equal to or less than the product of the conversion factor times the established relative value, then the insurance carrier or self insurer is authorized to make immediate payment. In the event the charge is in excess of this amount, the bill will be submitted to the Industrial Commission and reviewed by the Medical Consultant. If it is found that an extra degree of professional skill related to that specific procedure has been involved and the extra charge is determined appropriate, the bill will be allowed. If no extra degree of professional skill was involved, the bill submitted will be reduced to conform with the product of the conversion factor times the relative value. The carriers have been instructed that if the charge is in excess of the present allowable fee schedule, they may contact the physician and discuss the fee with him. If they can reach an agreement, it can be handled on that level; if not, it will be presented to the committee.

Dr. Harrell presented remarks concerning the status of physicians with regard to the Workmen's Compensation program now as compared to their position a few

Radiology

Technical Error Corrected

The first illustration in the article entitled "A Radiologic Consultation: Acute Abdominal Pain" did not show a coprolith in the right lower quadrant, as published in the January issue, because of a technical error. The article was prepared by Dr. Marvin S. Berk of Jacksonville as a special page for the Florida Radiological Society.

The Journal presents the illustration as it should have appeared, with an apology to Dr. Berk and his colleagues.

years ago, when they had practically no voice in setting up the program. He called attention to the 1963 annual report of the Committee on Fee Schedules, which was presented to the House of Delegates of the Florida Medical Association and which was discussed in Reference Committee by the House of Delegates and subsequently published in The Journal of the Florida Medical Association. This report stated that attempts would be made to get the Florida Industrial Commission to accept the relative value concept, and to agree to a no published fee schedule. He pointed out that physicians who say they had heard nothing about all this had every opportunity through the mediums listed to become informed of the workings of the committee. He further commented as to the merits of a "no printed fee schedule," the fact that this system costs less and avoids the possibility of a fixed fee schedule becoming a "minimum or maximum schedule." He emphasized that physicians should under the present system charge their regular fees.

Mr. Lee told the group that it is important to try to set the program in a manner so that everyone can discuss it in the proper light. He said the medical profession should be extremely proud of Dr. Babers for the work his committee has put forth and the abuses they have taken. He pointed out that there are few defenders left of the real free enterprise system, and the profession that has tried its best to help the rest is the medical profession.

Dr. Ferguson presented a few remarks regarding some of the more common complaints from physicians regarding the program. He explained that although insurance carriers have a "brown book," the physicians have the same information in the Florida Medical Association's Relative Value Studies and the "green book." He explained that the Relative Value Studies were compiled after surveying doctors in Florida as to their average charges. He also explained the purpose of the Council on Specialty Medicine, through which questions and comments regarding the Workmen's Compensation fee schedule have been and should continue to be directed.

Mr. Brown thanked the participants for their remarks and opened the floor for questions and discussion. The questions were mainly regarding procedures for billing and handling specific and general claims which were in excess of the allowable fee schedule. The vast majority of the questions were not of complaint nature but concerned administrative interpretation by the Florida Industrial Commission. The questions presented were primarily with reference to the following items:

Charges for materials and supplies used.
Proper use of single and multiple code numbers.
The meaning of what is or is not included in asterisk items.
Follow-up visits.
What constitutes an office visit and after-care.
What to do when more than one injury is treated in the same visit.
When the injured patient is covered in another state.
Who is responsible for seeing that the employer's report is submitted.
The procedure for billing when a compensable injury is being treated and a second noncompensable problem is encountered.

In the summary discussion it was brought out that of the 10 Southeastern states, the cost of the Workmen's Compensation program is the highest by 8½ per cent and that many states have a limit on total amount payable for compensation cases. Florida does not.

In answer to the question of why a physician should submit his usual fee even though he knows it will not be paid, Dr. Day pointed out that all charged fees and all paid fees are being tabulated for statistical purposes and after a period of time such information will be used in making appropriate changes.

The meeting adjourned at 9:45 p.m.

Workmen's Compensation Program

Emmet F. Ferguson Jr., M.D.

Why were the insurance companies given a "brown book" with relative values conversion factors and the doctors provided a "green book" with only code numbers and nomenclature?

Resolutions have been sent to the Florida Medical Association recommending that the same schedule be given to each individual doctor, but let us point out that this will defeat the purpose for which we are striving, that is, an "average no printed fee schedule." This would make the brown book a minimum as well as maximum fee schedule. This will not be reflected in the actuarial statistical analysis, since all these will be the same. It is not practical for a physician to send his average fee in and have it returned to be processed and more paper work. This is being seen today with the $5 fee where the doctor's customary office fee is $5 and he does not charge $4.50, but yet the claim will be sent back to him. We think this could be rectified by having a fee of $5 paid to the physician and maybe there should be a guideline for some of the basic more common services while at the same time the overall big procedures could still be kept in the manner in which we are handling them. From time to time, certain suggestions should be passed out to all doctors by the Medical Advisory Committee to Workmen's Compensation.

Each physician is represented by a member on the Council on Specialty Medicine, and if he has any particular problems which he wishes to have solved or his viewpoints expressed, he should direct them to the representative on the Council on Specialty Medicine. As an example, Dr. Pedro Arroyo pointed out that the Florida Industrial Commission had approved a schedule for some physical therapists, and for some procedures they were being paid more for their work than physicians. This difference is being called to the attention of the Industrial Commission through the Council on Specialty Medicine and in due course of time we hope it will be corrected. It is to be pointed out that avenues are set up in the Florida Medical Association for the expression of your viewpoints and it will work to your better advantage and to the advantage of medicine as a whole to familiarize yourselves with these channels in order that we may know what the problems are and institute the correction for them. Dr. Thomas Bixler has pointed out excellently that we now have the ear of the people in the Florida Industrial Commission and they are acting in a most cooperative manner to help us solve these many diverse medical administrative problems. If we all go at this in an individual way, it becomes impossible to be familiar with all the individual problems and can only raise resentment for medicine as a whole.

It is always well for us to point out that in dealing with Workmen's Compensation cases we have the privilege of not handling or handling them—the choice is left up to you. No physician is forced to take a Workmen's Compensation case, or not to take it. It will work to the advantage of medicine as a whole for the doctors to participate voluntarily in this program. There are certain guidelines I think we should all know about and they involve the five freedoms of choice in dealing with Workmen's Compensation: (1) Employer (his is the greatest, since he pays the bill), (2) Patient (the patient gives up certain suit rights), (3) Doctor (the doctor accepts a certain range of fees), (4) Insurance Company (abides by rulings and rates of the Commission), and (5) State of Florida—Florida Industrial Commission (seeks justice and harmony from the preceding four). These five factors make up Workmen's Compensation. They have to be harmoniously resolved. One cannot step out of line and infer that he is the big cog in the wheel because we are all spokes of the same wheel. When this is understood, the factors of Workmen's Compensation are not hard to

come by. Also, we think that the doctor should be paid a normal and reasonable fee for any service and the Fee Schedule Committee of the Florida Medical Association has been working for this overall objective for a number of years. It has to be pointed out that some of the solutions to date have not been altogether to our desires, but we have made considerable progress and you now have the best Workmen's Compensation fee schedule in the United States. If anyone knows of a better Workmen's Compensation schedule in effect in some other state, please make it known. We also have the cooperation of industry and the Florida Industrial Commission and they think we all are working harmoniously to the best interest of all parties concerned. A survey of all Workmen's Compensation fee schedules in the United States reveals that there are only eight states where the Workmen's Compensation claims are reviewed by a medical consultant and/or a medical advisory committee. It is one of the tentative objectives of the medical profession eventually to have the claims reviewed by each county medical society at the local level and when this is done, we think this plan will work to the advantage of the doctor, industry, and the insurance company. If there is a schedule deviation, some provision should be made for the review of these charges by physicians at the local level. At the present time, they are reviewed by the physicians at the advisory level. This is an objective to be sought. At the present time, however, the constitutional and legal involvements have not been adequately worked out by all concerned.

Most doctors do not realize that they have at their disposal the same information that is in the "brown book" furnished the carrier. This was made up directly from the 1962 Relative Value Studies published by the Florida Medical Association, the information for which was gathered from you by a survey. The procedures listed in the green book are those considered to be applicable to the Workmen's Compensation program. There will always remain inequities in any fee schedule and any system of handling claims, but whenever you see an obvious inequity, we urgently request that you send this information to the Council on Specialty Medicine or the Medical Advisory Committee to the Florida Industrial Commission, whichever way you wish to do it.

In cooperating with the program all the physicians are urged to use some restraint and to seek to make this schedule work, as it has many advantages to you that a simple, fixed, maximum fee schedule would not have. These advantages will be more apparent as the years go by. We have fought long and hard to try to get the concept of having the physician paid what he would normally charge for a person of like standard of living. Section 440.13 (3) (a) Florida Statutes provides: "All fees and other charges for such treatment or service shall be limited to such charges as prevail in the same community for similar treatment of injured persons of like standard of living, and shall be subject to regulations by the commission, who shall adopt schedules of charges for such treatment or services."

It should be pointed out that the community has been interpreted by the Attorney General to mean the state of Florida. This is in part true and in part not. Some of this is in the process of negotiation. Also, one should point out that Dr. Zellner, in the recent review of the U. S. Labor Department's Statistics, has determined that the average worker covered by Workmen's Compensation in the state of Florida has an annual salary of $4,700. This figure is for the worker alone and not the family. The report by Kiplinger shows the average family in the United States has an annual income of $7,500. The Florida Medical Association in conjunction with the Florida Industrial Commission is working toward the ultimate of recognizing that a fee schedule is not a fixed and inviolate schedule of fees, but is to be used as a "guide or standard" by which to judge fairly the doctors' charges, and though we may never get complete agreement on this, the objective is there. We can only seek to obtain it through our combined cooperative efforts

Eleventh Annual

CENTRAL FLORIDA MEDICAL MEETING

CHERRY PLAZA HOTEL

ORLANDO

February 11-13, 1965

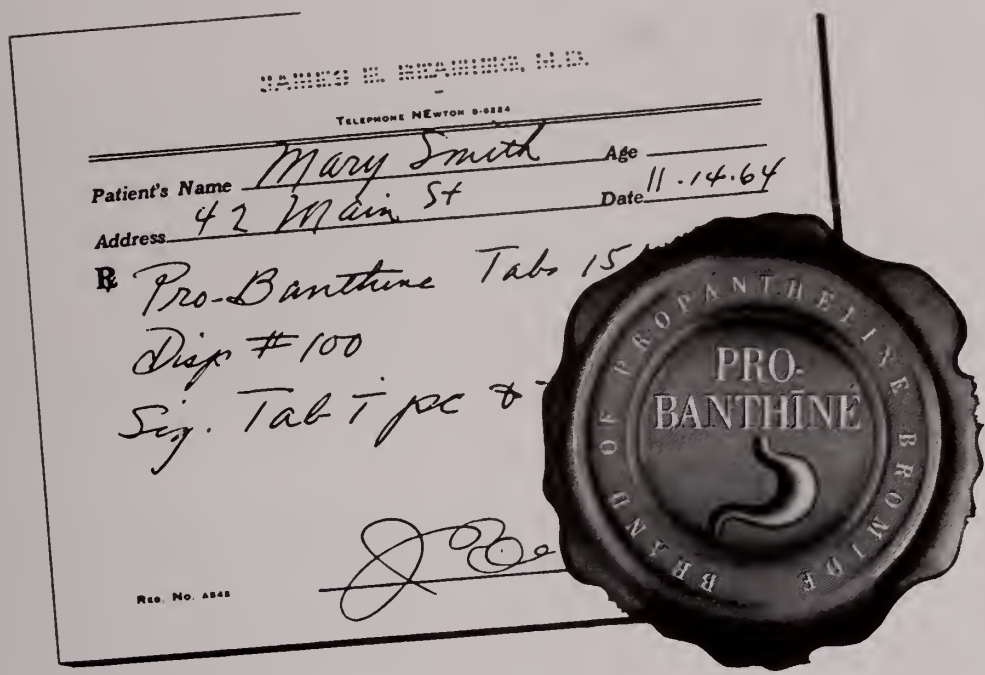
Fireside Conferences 8:00 p.m., Thursday; Meetings Friday and Saturday

Guest speakers include Dr. Bruce Logue (Emory), Dr. Ivan Brown (Duke), Dr. Robert Greenblatt (Georgia), Dr. James Jude (Miami), Dr. Elbert Tuttle (Atlanta), Dr. Wood Lovell (Atlanta), Dr. Charles Carter (Sunland Training Center).

A variety of subjects will be discussed, including cardiac arrhythmias, hyperbaric oxygenation, renal failure, hypertension, lasers, trauma, newer aspects of chromosomal disorders, cardiovascular surgery, stimulation and suppression of ovulation.

Scientific and commercial exhibits; golf tournament Thursday; opera Friday evening, "La Traviata."

For information write Orange County Medical Society, 14 W. Gore Ave., Orlando. Those desiring opera tickets should write at once for information and purchase tickets soon, as a sellout is likely. Registration fee will not exceed $5.00.



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News

A one week course in "Rehabilitation of the Physically Handicapped" is being offered by the University of Miami School of Medicine and the Rehabilitation Center for Crippled Children and Adults beginning March 22 at the Rehabilitation Center in Miami.

The Twenty-Eighth Annual New Orleans Graduate Medical Assembly is scheduled for March 8-11 with headquarters in the Roosevelt Hotel at New Orleans. Details are available from the office of the Assembly, Room 1528, 1430 Tulane Ave., New Orleans.

Dr. Sullivan G. Bedell of Jacksonville has been chosen President-Elect of the Southern Psychiatric Association.

The Florida Midwinter Seminar of Ophthalmology and Otolaryngology will be held in the Americana Hotel at Miami Beach February 8-13. It is being presented in cooperation with the University of Florida College of Medicine and the University of Miami School of Medicine.

The Central Florida Medical Meeting sponsored by the Orange County Medical Society begins February 11 for three days. It is being held in the Cherry Plaza Hotel at Orlando.

On March 17-20, the Department of Radiology of the University of Miami School of Medicine and Jackson Memorial Hospital will present the Third Postgraduate Seminar in Radiology. Sessions are being held at the Hotel Fontainebleau, Miami Beach.

The North Florida Pathologists Association will hold its regular meeting at 8:00 p.m., Saturday, February 20, in the auditorium of Baptist Memorial Hospital in Jacksonville. The program will be a slide seminar moderated by Dr. Donald B. Frazier.

Dr. Herbert E. Kaufman of Gainesville, Associate Professor, Department of Surgery, and Chief of the Division of Ophthalmology at the University of Florida College of Medicine, has been selected by the United States Junior Chamber of Commerce as one of the ten outstanding young men for 1964.

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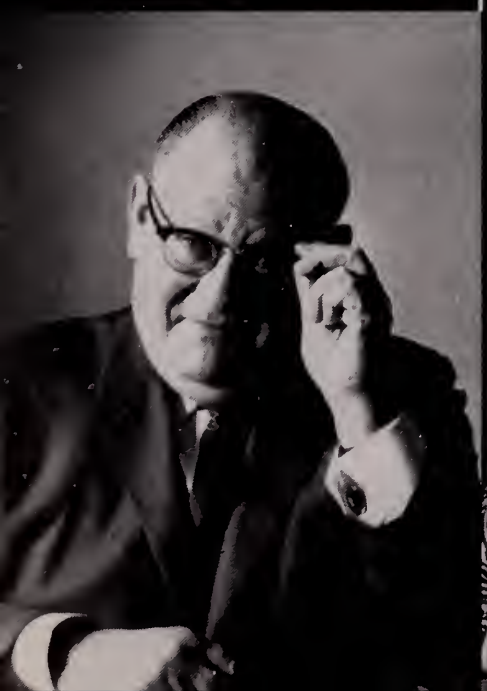
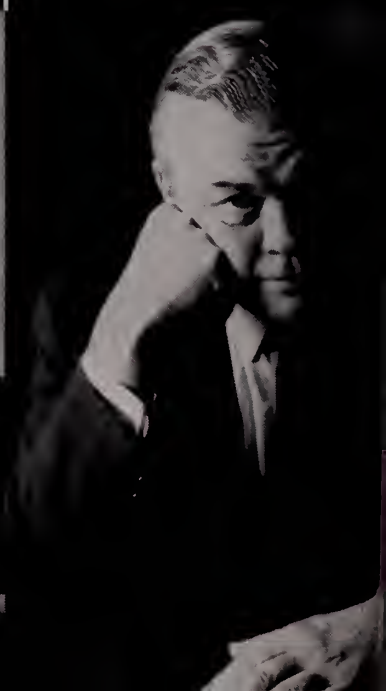
...fasting serum levels of insulin are usually normal, postprandial levels excessive[1-3]

...insulin acts in adipose tissue via hexose monophosphate shunt, principal path of glucose conversion to storage fat[1,4]

...excessive endogenous insulin acts to stimulate lipogenesis and weight gain[1,3,4]





Meetings

February

Midwinter Seminar in Ophthalmology and Otolaryngology, 19th Annual, February 8-13, Hotel Americana, Miami Beach

Seminar in Psychiatry in Medicine, Department of Psychiatry, University of Miami School of Medicine, Jackson Memorial Hospital, begins February 10, continues each week.

Central Florida Medical Meeting, February 11-13, Cherry Plaza Hotel, Orlando

Seminar on Surgery of the Hand, February 13, Auditorium, Duval Medical Center, Jacksonville.

March

Seminar in Obstetrics and Gynecology, March 4-5, University of Florida College of Medicine, Gainesville

Watson Clinic Seminar, "Recent Advances in Diagnosis and Therapy," March 6, Watson Clinic, Lakeland

Third Postgraduate Seminar, "Gastrointestinal Roentgenology," sponsored by Department of Radiology, University of Miami School of Medicine, and Jackson Memorial Hospital, March 17-20, Fontainebleau Hotel, Miami Beach.

"Principles in the Rehabilitation of the Physically Handicapped," March 22-26, Rehabilitation Center, Miami.

April

Florida Medical Association, 91st Annual Meeting, April 22-25, Hotel Americana, Bal Harbour, Miami Beach.

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1. Gordon, E.S.: Metabolism 11:819, 1962. **2.** Grodsky, G.M. et al.: Metabolism 12:278, 1963. **3.** Weller, C. et al.: Scientific Exhibit, A.M.A., June 1962. **4.** Sadow, H.S.: Metabolism 12:333, 1963. **5.** Faludi, G.: J. Am. Med. Women's Assoc. 18:722, 1963. **6.** Faludi, G.: Geriatrics 18:452, 1963. **7.** Williams, R.H.: Textbook of Endocrinology, Ed. 3, Saunders, Phila., 1962, p. 610. **8.** Weller, C. and Linder, M.: Am. Therap. Soc., June 1963. **9.** Moss, J.M. et al.: Med. Times, July 1964.

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Vitamin B_{12} ..... 1 mcgm.
Niacinamide ..... 50 mg. (5 MDR)
*Inositol ..... 100 mg.
*Choline (as Tricholine Citrate). 100 mg.
*Pantothenic Acid (as D-Pantothenyl Alcohol)..... 10 mg.
Potassium (from KI and vehicle).. 10 mg.
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Iodine (as KI) ..... 0.1 mg. (1 MDR)
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†Calcium ..... 48 mg. (1/16 MDR)
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*The need for these substances in human nutrition has not been established.

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Vitamin C (Ascorbic Acid) .... 50 mg. (1⅔ MDR)
Vitamin E (d-a-Tocopheryl Acetate) ..... 10 Int. Units
Niacinamide ..... 15 mg. (1½ MDR)
Calcium Pantothenate ..... 5 mg.
Calcium (as Dibasic Calcium Phosphate) ..... 145 mg. (⅕ MDR)
Phosphorus (as Dibasic Calcium Phosphate). 110 mg. (⅙ MDR)
Elemental Iron (as Ferrous Fumarate) ..... 10 mg. (1 MDR)
Magnesium (as Magnesium Oxide) ..... 1 mg.
Potassium (as Potassium Sulfate).. 5 mg.
Iodine (as Potassium Iodide) ..... 0.1 mg. (1 MDR)
Copper (as Copper Oxide)..... 1 mg.
*Manganese (as Manganese Dioxide) ..... 1 mg.
*Zinc (as Zinc Oxide) ..... 0.5 mg.
*Choline Bitartrate ..... 50 mg.
*Inositol ..... 50 mg.
l-Lysine Monohydrochloride ..... 25 mg.

MDR—Adult Minimum Daily Requirement

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PEDIATRICIAN WANTED: Fine opportunity for practice and ownership in medical center—Florida West Coast. Write 69-618, P.O. Box 2411, Jacksonville, Florida.

WANTED: General Practitioner, preferably bilingual to be associated with specialist group. Write to Doctors Medical Center, 1055 Flamingo Way, Hialeah, Florida.

MEDICAL OFFICE AVAILABLE: Miami Beach, unusual opportunity for G.P. or specialist. Call Jefferson 1-1246 or contact Dr. Leonard Sakrais, 1500 Bay Road, Miami Beach, Fla.

FOR SALE: Professional building, 2,500 sq. ft., located in center of medical office buildings near Orange Memorial hospital, Orlando. The lot has 50,000 ft. for expansion and parking. Call MI 7-5500, Winter Park.

GENERAL PRACTITIONER, age 42, with Florida license, desires to associate with group in Fort Lauderdale area. Available Sept. 1, 1965. Write 69-619, P.O. Box 2411, Jacksonville, Fla.

American Optical binocular microscope. Four objectives with 10x widefield eye pieces. Includes mechanical stage and light. Excellent condition. $430. 4537 12th Ave. South, St. Petersburg, Fla.

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GULF COAST. Locum Tenens wanted for from one to three months. General practice. $1,500.00 per month. Could lead to permanent association if mutually agreeable. Write 69-622, P. O. Box 2411, Jacksonville, Fla.

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Woman's Auxiliary

Help Wanted

State Medical Association ! !
County Medical Society ! !
Doctor ! !
We Need Your Help.

It has been pointed out that at the present rate of growth of the Auxiliary it will take us 100 years to close the gap between the membership of the American Medical Association and that of its Auxiliary! This is, of course, if the membership of the AMA stood still while we caught up, which is hardly likely, considering that in this past year AMA's increase in membership was four times as large as ours. It is obvious, therefore, that something drastic must be done if the Auxiliary is ever to close the gap.

The plan proposed by the National Auxiliary Membership Chairman is that Auxiliary dues be collected by the county medical society. Both the doctor's dues to his medical society and the dues of his wife to the Auxiliary could be paid by one check. Auxiliary dues would then be returned to the Auxiliary by the medical society treasurer. The wife of every doctor holding medical society membership in a society having an Auxiliary would be an Auxiliary member.

This is a change which must be made at the county level, and such a change cannot be completed overnight. It will take time and can only be accomplished county by county. Only organized counties will be affected so that until every county is organized, we cannot completely close the gap, but if each county Auxiliary adopted a team-membership policy, what a difference it would make.

True, under the team-membership plan, some may become members who would not choose to be, but there is no coercion here for the change will have been brought about in the democratic way, by majority vote.

At the recent Clinical Convention of the American Medical Association in Miami Beach, the House of Delegates took action urging the local medical societies and the state medical associations to aid and encourage the Woman's Auxiliary, particularly the Auxiliary joint husband-wife membership project.

In Florida the membership in the Woman's Auxiliary is appproximateiy 50 per cent of the potential. LET US CLOSE THE FLORIDA GAP! The Auxiliary helps disseminate accurate health information to lay groups, promotes the objectives of the medical societies at every level, and has contributed over $4,000,000 to loans, scholarships and research through funds obtained for AMA-ERF.

Doctor, is your wife's name on the role of the greatest task force your medical society has? See that she is a member of the Woman's Auxiliary this year.

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Indications
Many types of edema involving retention of salt and water.
Contraindications
Hypersensitivity, and most cases of severe renal or hepatic disease.
Precautions
Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.
Side Effects
Constipation, dizziness, dysuria, headache, hyperglycemia, hyperuricemia, leukopenia, muscle cramps, nausea, purpura, thrombocytopenia, transient myopia, urticaria, vomiting and weakness.
Average Dosage
One tablet (100 mg.) daily with breakfast.
Availability
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Stoll[1] used the drug in 50 patients with anxiety, and noted: "There was no drowsiness in this group of patients and, because of their alertness and less impaired concentration, they were able to continue with and, in some cases, return to their daily work."

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Before prescribing, see SK&F Product Prescribing Information.

Photograph professionally posed.

1. Stoll, L. J.: The Use of Trifluoperazine ['Stelazine'] in General Practice, M. Press *243*:578 (June 29) 1960.

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Of 425 patients with confirmed G.I. infections... 387 or 91.1% were treated successfully with Signemycin®

Note:
Loughlin and co-workers* achieved cure (absence of parasites) in all 100 of their patients with *chronic amebic colitis*. Feces became negative in all within the planned ten-day period of Signemycin administration. Upon re-examination of the feces six weeks later, the offending pathogen *(E. histolytica)* had reappeared in only 7 cases.

*Loughlin, E. H. et al.: Antibiot. Med. 7:739, Dec., 1960.

Condition	No. of Patients	No. Responded to Signemycin
Amebiasis	237	222
Cholecystitis and cholangitis	105	97
Enteritis	41	31
Peritonitis	15	14
Various, including pancreatitis, appendicitis and colitis	27	23
Totals	425	387 (91.1%)

consistently effective...often when others fail

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Also available as Syrup, Pediatric Drops, and half-strength Capsules

Brief Summary and Bibliography follow.

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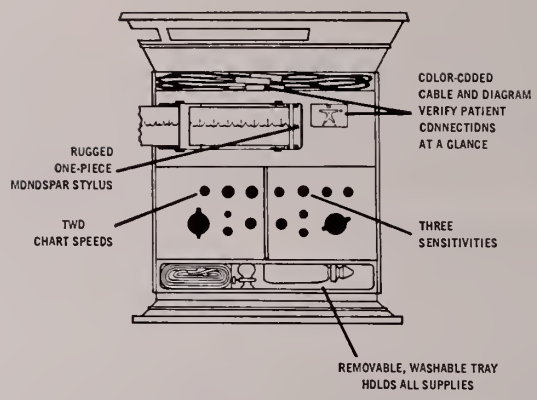

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Of 748 patients with confirmed G.U. infections... 684 or 91.4% were treated successfully with Signemycin®

Note:
The efficacy of Signemycin was shown in a study of nongonococcal urethritis involving over 1600 patients.* A comparison of the cure rates of sixteen antibiotic and chemotherapeutic agents revealed that Signemycin had the highest incidence of successful response. One hundred and six patients were treated, of which 82 were followed, with cures in 70.

*Willcox, R. R. and Rosedale, N.: Brit. J. Vener. Dis. 38:19, Mar., 1962.

Condition	No. of Patients	No. Responded to Signemycin
Cystitis	29	25
Pyonephritis	30	28
Pyelocystitis	119	112
Prostatitis	14	13
Gonorrhea	66	64
Lymphogranuloma venereum	96	96
Syphilis	31	31
Urethritis, nonspecific	149	131
Various, including infections seen with impaired urinary flow or lithiasis	214	184
Totals	748	684 (91.4%)

consistently effective...often when others fail

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tetracycline HCl, 167 mg.; oleandomycin as triacetyloleandomycin, 83 mg. capsules (250 mg.)

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Signemycin® Bibliography
1. Adams, J.: J. Tenn. Med. Ass. 50:446, Nov., 1957. **2.** Arachi, N. and Gheradi, F.: Quad. Urol. 9:156, Apr.-June, 1959. **3.** Arneil, G. C.: Antibiot. Ann. 1958-1959:327. **4.** Arrigoni, G. et al.: Minerva Med. 48:2701, Aug. 25, 1957. **5.** Baur, A.: Aerztl. Prax. 11:1845, Dec. 5, 1959. **6.** Bellomio, S. et al.: Riv. Ital. Tracoma, vol. 10, Nos. 1-2, Jan.-June, 1958. **7.** Bellomio, S. et al.: Riv. Ital. Tracoma, vol. 11, No. 1, Jan.-Mar., 1959. **8.** Belonoschkin, B. and Lindgren, M.: Svensk. Lakartidn. 56:2134, July 31, 1959. **9.** Bergdahl, U.: Svensk. Lakartidn. 55:1715, June 6, 1958. **10.** Bhattacharyya, M. N. and Bhuyan, J. N.: Antiseptic 56:611, Aug., 1959. **11.** Blass, R.: Schweiz. Med. Wschr. 89:158, Feb. 7, 1959. **12.** Bolognesi, C.: Minerva Med. 48:2695, Aug. 25, 1957. **13.** Candela, R. B.: Med. Esp. 46:273, Oct., 1961. **14.** Cappelli, E.: Minerva Med. 48:2690, Aug. 25, 1957. **15.** Carter, C. H. and Maley, M. C.: Antibiot. Ann. 1956-1957:51. **16.** Caruselli, M. and Musca, A.: Minerva Med. 51:3516, Oct. 17, 1960. **17.** Ceitlin, J.: Med. Panamer. 15:72, Aug. 1, 1960. **18.** Chattas, A. et al.: Antibiot. Med. 7:300, May, 1960. **19.** Chiarenza, A.: Minerva Med. 48:2692, Aug. 25, 1957. **20.** Cooper, J. et al.: Antibiot. Med. 5:302, May, 1958. **21.** Cupples, J. F. B. and Perry, A. W.: Canad. Med. Ass. J. 77:699, Oct. 1, 1957. **22.** David, N. A. and Carter, P. B.: Rocky Mountain Med. J. 58:27, Mar., 1961. **23.** Davis, W. G.: Clin. Rev. 1:21, Apr., 1958. **24.** de Lellis, J.: Dia Med., Apr. 24, 1958, p. 824. **25.** Dienz, H.: Aerztl. Prax. 13:1797, 1961. **26.** Dietel, V. and Meissner, F.: Deutsch. Gesundh. 16:2470, Dec. 28, 1961. **27.** Dryjski, J.: Pol. Tyg. Lek. 24:1113, June 24, 1959. **28.** Durrieu, C. A. et al.: Antibiot. Ann. 1958-1959:297. **29.** Faz Tabio, H.: Rev. Cuba. Pediat. 30:219, Apr., 1958. **30.** Febles Alonzo, D. and Batthyany, C.: Actas Ginecotocol. (Uruguay) 13:4, Aug., 1959. **31.** Febles Alonzo, D. and Biderman, I.: Antibiot. Ann. 1958-1959:270. **32.** Fiora, F. and Compa, F.: Dia Med., Apr 3, 1958, p. 570. **33.** Garre, E.: Antibiot. Med. 7:285, May, 1960. **34.** Geiger, K.: Praxis 15:365, Apr. 9, 1959. **35.** Gemma, G. B. et al.: Minerva Med. 48:2643, Aug. 25, 1957. **36.** Gerner, G.: Arzneimittelforschung 9:484, Aug., 1959. **37.** Grazia, G.: Clin. Pediat. (Bologna) 41:1005, Nov., 1959. **38.** Greco, O.: Med. Condotto-Med. Prat. 9:497, 1958. **39.** Hammerl, H.: Wien. Med. Wschr. 108:629, July 26, 1958. **40.** Henne, H. F.: Med. Klin., No. 29, July 18, 1958, p. 1267. **41.** Heredia Diaz, J. et al.: Medicina (Mex.) 38:308, July 10, 1958. **42.** Herrera, W. A.: Dia Med. 30:3116, Dec. 8, 1958. **43.** Hoffmann, H.: Medizinische (Stuttgart) 45:1830, Nov. 8, 1958. **44.** Kelleher, D.: Practitioner 182:227, Feb., 1959. **45.** Kleine, W. and Hagen, H.: Ther. Gegenw. 98:171, Apr., 1959. **46.** Klovstad, O.: T. Norsk. Laegeforen. 77:681, Aug. 15, 1957. **47.** Kobari, K. and Tajiri, I.: Naika No Ryoiki (Field of Internal Medicine) 7:245, May, 1959. **48.** Kohler, H. F.: Clin. Rev. 1:16, Apr., 1958. **49.** Kraljevic, R. et al.: Antibiot. Med. 5:364, June, 1958. **50.** La Caille, R. A. and Prigot, A.: Antibiot. Ann. 1956-1957:67. **51.** Lapeyre, L. et al.: Marseille Med. 99:953, 1962. **52.** Levi, W. M., Jr. and Kredel, F. E.: J. S. Carolina Med. Ass. 53:178, May, 1957. **53.** Loughlin, E. H. et al.: Antibiot. Ann. 1958-1959:293. **54.** Loughlin, E. H. et al.: Antibiot. Med. 7:739, Dec., 1960. **55.** Mathur, S. N. and Joshi, V. S.: J. Indian Med. Ass. 34:437, June 1, 1960. **56.** Moggian, G.: Minerva Med. 48:2648, Aug. 25, 1957. **57.** Molinelli, E. A. et al.: Antibiot. Ann. 1957-1958:692. **58.** Montilli, G. and Avellino, M.: Dermatologica (Basel) 9:2, 1958. **59.** Morador, J. L. et al.: Antibiot. Ann. 1959-1960:716. **60.** Morador, J. L. and Saldana Tate, L.: An. Ateneo, Clin. Quirur. 1:52, Jan., 1958. **61.** Morel, A. S.: Clin. Rev. 1:18, July, 1958. **62.** Morey, G. S. et al.: Rev. Hosp. Nino (Lima) 18:293, 1957. **63.** Ottolenghi, C. E. et al.: Bol. Soc. Cir. B. Air. 41:739, Nov. 6, 1957. **64.** Pagola, J. G. et al.: Antibiot. Ann. 1958-1959:287. **65.** Pavone, M. et al.: Minerva Urol. 70:121, Sept.-Oct., 1958. **66.** Porrazzo, F.: Gazz. Med. Ital. 118:550, Dec., 1959. **67.** Prats, F. and de la Parra, M. A.: Antibiot. Ann. 1959-1960:484. **68.** Prokop, O.: Prakt. Arzt. 12:145, Feb. 15, 1958. **69.** Ramirez Boettner, C. M. et al.: Rev. Med. Paraguay 5:269, July-Sept., 1960. **70.** Randig, K.: Deutsch. Med. J. 8:447, Aug. 15, 1957. **71.** Saavedra Amaro, S. and Lopez Zepeda, L.: Medicina (Mex.) 38:396, Aug. 25, 1958. **72.** Saldana Sotomayor, F.: Medicina (Mex.) 39:191, May 10, 1959. **73.** Santos, A.: Rev. Brasil. Med. 16:463, July, 1959. **74.** Schenone, H.: Antibiot. Ann. 1958-1959:316. **75.** Schunk, A.: Int. Rec. Med. 173:143, Mar., 1960. **76.** Sgarzini, L. and Amato, R.: Ann. Stomat. 7:499, July, 1958. **77.** Shubin, H.: Antibiot. Med. 4:174, Mar., 1957. **78.** Sundberg, R. H.: Antibiot. Med. 7:115, Feb., 1960. **79.** Talbot, J. R.: Wisconsin Med. J. 57:237, June, 1958. **80.** Tato, J. M. et al.: Antibiot. Ann. 1957-1958:675. **81.** Weithofer, W.: Medizinische (Stuttgart) No. 33-34:1490, Aug. 22, 1959. **82.** Willcox, R. R. and Rosedale, N.: Brit. J. Vener. Dis. 38:19, Mar., 1962. **83.** Willemot, J. P. et al.: Bruxelles Med. 38:1026, June 22, 1958. **84.** Winton, S. S. and Chesrow, E. J.: Antibiot. Ann. 1956-1957:55. **85.** Wolman, B.: Practitioner 185:199, Aug., 1960. **86.** Yodh, B. B.: J. J. J. Group Hosp. 5:183, July, 1960. **87.** Zaldivar, C. G. and Falcone, F. L.: Rev. Hosp. Nino (Lima) 20:141, June, 1958.

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Side Effects: Glossitis and allergic reactions, as well as severe anaphylactoid reactions, have been reported as rare side effects. Should significant reaction or idiosyncrasy occur, discontinue medication and institute countermeasures. Use of tetracycline during the last trimester of pregnancy, neonatal period and early childhood may cause discoloration of developing teeth. Reduce usual oral dosage and consider serum level determinations in patients with impaired renal function to prevent possible liver toxicity due to excessive accumulation of antibiotic in the serum.

Precautions: Overgrowth of nonsusceptible organisms may occur. In such cases, discontinue medication and institute appropriate specific therapy as indicated by susceptibility testing. Aluminum hydroxide gel given with antibiotics has been shown to decrease their absorption and is contraindicated. The coloring agents used in Signemycin Syrup and Pediatric Drops may produce red discoloration of stools.

Triacetyloleandomycin, a constituent of Signemycin, administered to adults in daily oral doses of 1.0 Gm. (3 Gm. Signemycin) for periods of more than ten days may produce hepatic dysfunction and jaundice. In the rare patient who requires this high dosage level of Signemycin initially, liver function should be carefully followed and dosage should be reduced, as promptly as possible, to the usual recommended range of 1.0 to 2.0 Gm. per day. Therefore, Signemycin is recommended primarily for the treatment of acute or severe infections, with treatment restricted to a ten-day period. If clinical judgment dictates continuation of therapy beyond ten days, serial monitoring of the liver profile should be carried out, including BSP, transaminase, and cephalin flocculation tests. Changes observed in liver function were reversible following discontinuation of the drug.

Formulas: Capsules: 250 mg. Signemycin (167 mg. tetracycline HCl and 83 mg. oleandomycin as triacetyloleandomycin).

Capsules: 125 mg. Signemycin (83 mg. tetracycline HCl and 42 mg. oleandomycin as triacetyloleandomycin).

Syrup: 125 mg. Signemycin (tetracycline equivalent to 83 mg. tetracycline HCl and 42 mg. oleandomycin as triacetyloleandomycin) per 5 cc.

Pediatric Drops: 100 mg. Signemycin (tetracycline equivalent to 67 mg. tetracycline HCl and 33 mg. oleandomycin as triacetyloleandomycin) per cc.

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Note:
The high rate of response to Signemycin in these cases is noteworthy because the totals include many patients with difficult-to-treat infections, many whose infections had proved resistant to other agents, and many who had been treatment failures on other therapy.[1-87] In addition the following criteria were used for the cases cited: (1) only published results were used (2) results were confirmed by clinical and/or laboratory findings (3) patients were cured, not "improved" (4) dosage conformed with current recommendations in the United States (5) no other anti-infective agents were used concomitantly (6) no instance of prophylactic use was included in these tabulations.

Condition	No. of Patients	No. Responded to Signemycin
Ear, nose and throat infections	507	465
Respiratory infections	1,028	954
Gastrointestinal infections	425	387
Genitourinary infections	748	684
Skin and soft-tissue infections	1,088	1,036
Bone and joint infections	71	64
Deep-seated or generalized infections	257	251
Obstetrical & gynecological infections	341	320
Miscellaneous conditions	592	570
Totals	5,057	4,731 (93.5%)

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Vitamin B_6 (Pyridoxine HCl)	2 mg.
Vitamin B_{12} Crystalline	4 mcgm.
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Salicylamide	250 mg.
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Ascorbic acid (Vitamin C)	25 mg.

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—rapidly relieves early morning stiffness and arthritic pain. It promises a quicker response in most patients because its analgesic ingredients need no metabolic conversion before they act. As a combination of two prominent analgesic drugs, Arthralgen can often establish smoother, more complete pain relief because it synergistically produces more efficient analgesia on lower dosage levels of each.

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Arthralgen combines two better-tolerated, time-tested analgesics, acetaminophen and salicylamide, into a pharmacologically sound and therapeutically effective formulation. As Arthralgen, it penetrates tissues promptly and relieves pain rapidly with less likelihood of gastric irritation than aspirin.

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Arthralgen contains no sodium. Therefore, it is often a safer and more suitable analgesic for use in the long-term treatments of arthritic patients who have other conditions which require sodium restriction.[1]

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Prednisone	1 mg.

To help provide dosage flexibility in patients who require steroids, the basic Arthralgen formula is also available combined with prednisone as Arthralgen-PR. Prednisone is favored as the more advantageous steroid for use in Arthralgen-PR because it shows less tendency toward sodium retention, potassium excretion, and steroid-induced hypertension than that which often accompanies the use of cortisone and ACTH.[2]

A. H. ROBINS COMPANY, INCORPORATED/RICHMOND, VIRGINIA

BRIEF SUMMARY

Arthralgen and Arthralgen-PR are indicated in the management of rheumatoid arthritis, acute gouty arthritis, rheumatoid spondylitis, osteoarthritis, bursitis, fibrositis, and neuritis. Arthralgen may be used for analgesia in colds, flu, and various myalgias.

DOSAGE: One or two tablets four times a day. After remission of symptoms dosage should be reduced to the minimum maintenance level.

SIDE EFFECTS: Nausea, GI upset, or mild salicylism may rarely occur. Symptoms of hypercorticoidism dictate reduction of dosage of Arthralgen-PR.

PRECAUTION: Reduction in dosage of Arthralgen-PR given over a long period should be gradual, never abrupt.

CONTRAINDICATIONS: Hypersensitivity to any ingredient.

As with any drug containing prednisone, Arthralgen-PR is contraindicated, or should be administered only with care, to patients with peptic ulcer, tuberculosis, nephritis, diabetes mellitus, acute psychoses, Cushing's syndrome (or Cushing's disease), overwhelming spreading (systemic) infection, or predisposition to thrombophlebitis.

Arthralgen-PR is generally contraindicated in patients with uremia and viral infections, including poliomyelitis, vaccinia, ocular herpes simplex, and fungus infections of the eye. It is also contraindicated in patients with chicken pox or susceptible persons exposed to it.

SUPPLY: Arthralgen (white, scored) and Arthralgen-PR (yellow, scored) tablets are available in bottles of 100 and 500.

REF: 1. Boreus & Sandberg, ACTA. PHYSIOL. SCAND., 28:266, 1953. 2. Cohen, et al.: J.A.M.A., 165:225, 1957.

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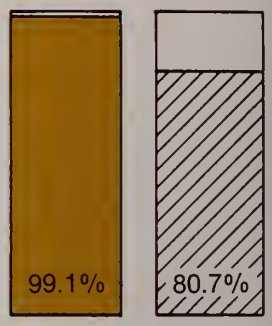
The superior antibacterial action of Safeguard has been demonstrated by a variety of techniques. Below are some of the comparative results obtained with Safeguard ▬ and another leading deodorant and antibacterial bar soap containing 0.5% hexachlorophene and 0.5% 3,4,4′-trichlorocarbanilide. ▨

superior residual antibacterial effect proved by handwashing tests

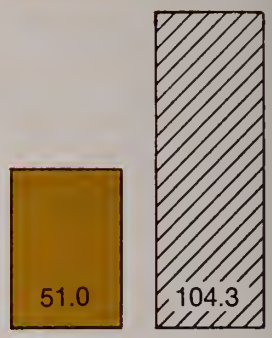
In a modified Price multiple washbasin procedure, Safeguard attained an average reduction of 99.1% in the number of organisms recoverable from the final rinse water, as compared to an average of 80.7% for the other antibacterial bar soap tested. Both products had been used exclusively for four days prior to evaluation.

Safeguard has also proved its superior residual bacteriostasis in field tests conducted under everyday household conditions as measured by a simplified washbasin technique.



superior residual antibacterial effect confirmed by skin stripping technique

Safeguard and the other antibacterial bar soap were used for normal everyday toilet purposes by a group of housewives for 14 days. Layers of superficial skin cells were then taken by a stripping technique to determine the density of the bacterial population. The average count per 2.25 sq. cm. for Safeguard was 51.0 while the finding for the other antibacterial bar was 104.3—more than double Safeguard's reading.



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Valium (diazepam) may also be useful in acute agitation due to alcohol withdrawal.

Valium (diazepam) may be of use to alleviate muscle spasm associated with cerebral palsy and athetosis.

Dosage and administration	*Usual daily dose*
Mild to moderate psychoneurotic reactions: Manifested by anxiety-tension alone or with depressive symptomatology, agitation, restlessness, psychophysiological disturbances	2 mg to 5 mg, 2 or 3 times daily
Severe psychoneurotic reactions: Where severe anxiety, fear, agitation, aggression or hostility exist alone or with depressive symptoms	5 mg to 10 mg, 3 or 4 times daily
Alcoholism: As an aid in symptomatic relief of acute agitation, tremor, impending or acute delirium tremens and hallucinosis	10 mg, 3 or 4 times during the first 24 hours; reducing to 5 mg, 3 or 4 times daily as needed
Muscle spasm associated with cerebral palsy or athetosis	2 mg to 10 mg, 3 or 4 times daily

Contraindications: Valium (diazepam) is contraindicated in infants, patients with a history of convulsive disorders or patients with a history of glaucoma.

Warning: Valium (diazepam) is not of value in the treatment of psychotic patients, and for this reason should not be employed in lieu of appropriate treatment.

Precautions: In elderly or debilitated patients, it is important to limit the dosage to the smallest effective amount to preclude the development of ataxia or oversedation (not more than 1 mg, 1 or 2 times daily initially, to be increased gradually as needed and tolerated). As is true of all CNS-acting drugs, until the correct maintenance dosage is established, patients receiving Valium (diazepam) should be advised against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving an automobile during the period of Valium (diazepam) therapy is not recommended. In general, the concurrent administration of Valium (diazepam) and other psychotropic agents is not recommended. If such combination therapy is used, careful consideration should be given to the pharmacology of the agents to be employed with Valium (diazepam) — particularly with known compounds which may potentiate the action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants.

Since Valium (diazepam) has a central nervous system depressant effect, patients should be advised against the simultaneous ingestion of alcohol and other central nervous system depressant drugs during Valium (diazepam) therapy. Safe use of Valium (diazepam) during pregnancy has not been established. The usual precautions are indicated when Valium (diazepam) is used in the treatment of anxiety states where there is any evidence of impending depression; particularly the recognition that suicidal tendencies may be present and protective measures may be necessary. The usual precautions in treating patients with impaired renal or hepatic function should be observed.

Side effects: In clinical use, fatigue, drowsiness and ataxia have been reported; in most instances these are dose-related and may be avoided by proper dosage adjustment. Mild nausea and dizziness may occur on occasion. As with any new agent, when it is administered for protracted periods of time, periodic blood counts and liver function tests are advisable. Abrupt cessation after prolonged overdosage may, in some patients, produce withdrawal symptoms (e.g., convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and Librium® (chlordiazepoxide HCl). Changes in EEG patterns have been observed in patients during and after Valium (diazepam) treatment.

Paradoxical reactions, such as excitement, depression, stimulation, sleep disturbances, acute hyperexcited states and hallucinations have been reported. Other side effects noted have been blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash.

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March, 1965
Vol. 52, No. 3

The JOURNAL of the Florida Medical Association

Needle Aspiration Biopsy

Surgical Trauma in Urologic Patients

Psychological Adaptation of Man

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*Lennox, W. G.: Epilepsy and Related Disorders, Boston, Little, Brown and Company, 1960, vol. 2, p. 865.

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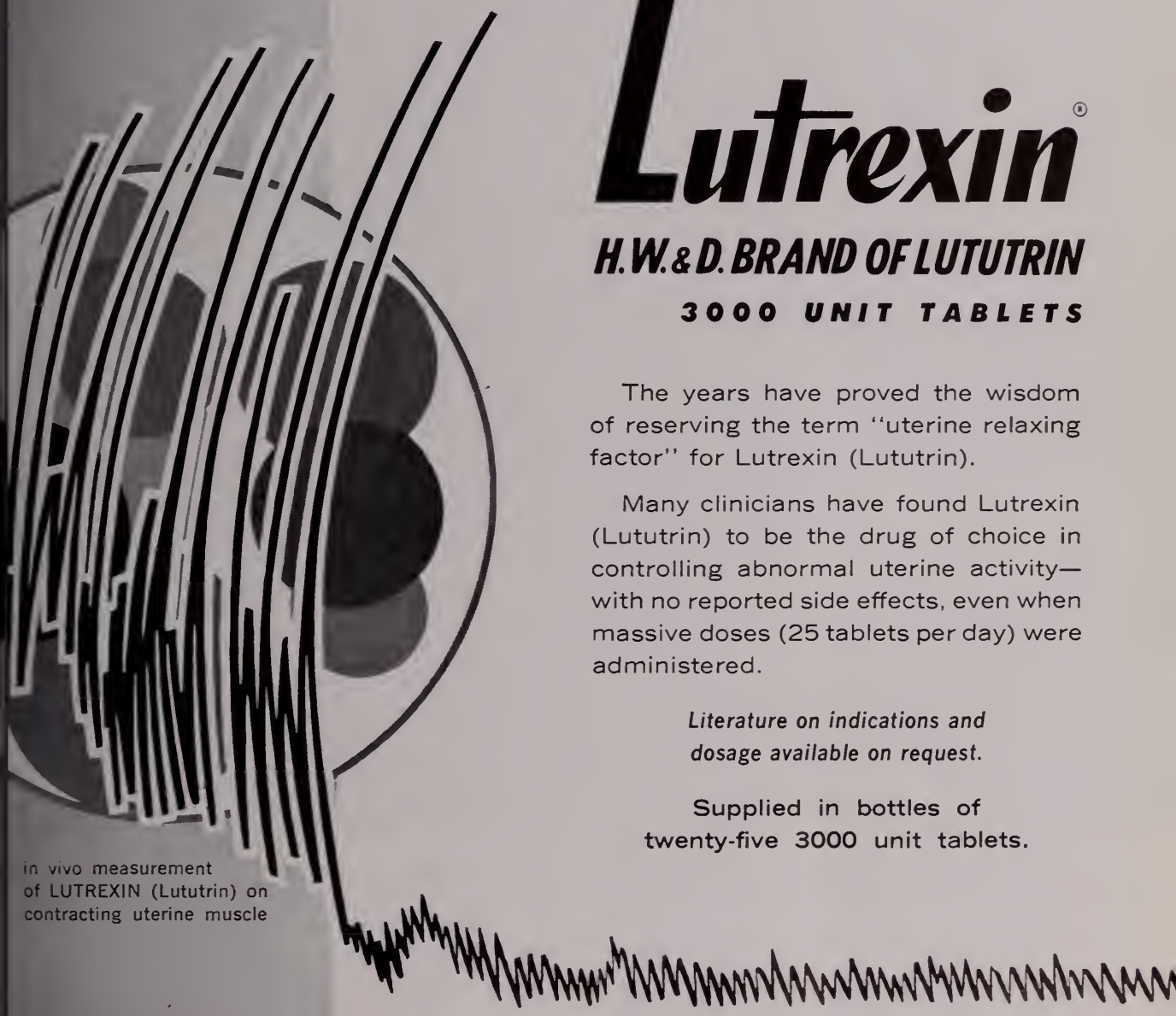

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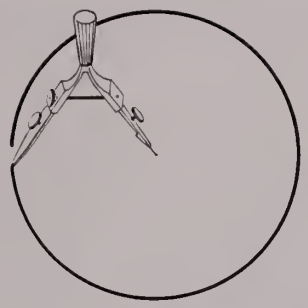

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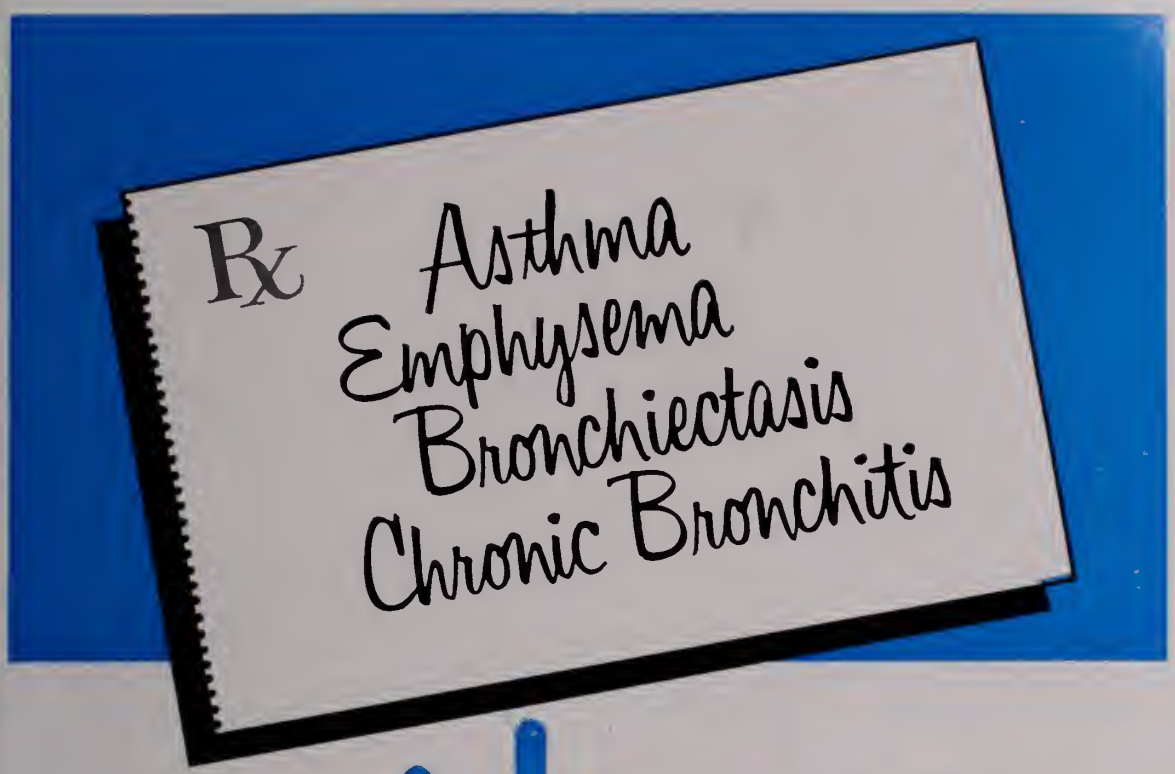

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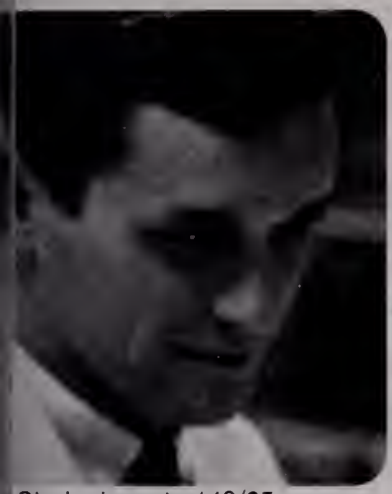

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*Chupkovich, V.; Finnerty, F. A., Jr., and Kakaviatos, N.: The value of chlorthalidone plus reserpine in moderately severe and severe hypertension: A two year study. Presented at the 7th Inter-American Congress of Cardiology, Montreal, June 14–19, 1964.

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*A.M.A. Council on Drugs: J.A.M.A. 183:469 (Feb. 9) 1963.

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1. Nathan, L. A.: Exhibit presented at Mich. Acad. Gen. Pract., Detroit, Mich., Nov. 10-12

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1. Griffith, R.S., and Black, H.R.: Current Ther. Res., *6*: 253, 1964.

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The JOURNAL
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The Use and Abuse of Needle Aspiration Biopsy

A Recommendation of Mammography as a Substitute for Needle Aspiration Biopsy for Breast Carcinoma

JACOB A. GLASSMAN, M.D.,
MIAMI BEACH

Today the acceptance of needle aspiration biopsy is indeed varied. It has been completely rejected by some and well received by others. The more serious aspect is that it has been overenthusiastically applied. It is thought by most physicians that needle aspiration has certain definite advantages, but only as a convenient and quick ancillary diagnostic aid to be employed in very select instances. If needle aspiration biopsies are to be routinely employed, they should preferably be restricted to those hospitals only that have physicians with experience in its technic as well as in its interpretation. The ideal type of biopsy varies depending upon the location of the primary lesion, the type of lesion, the vulnerability of the organ or lesion exposed to the trauma of biopsy, accuracy and safety of the technic, the condition of the patient, and the stage of development of the disease. When the tumor is vascular or exists in a highly vascular environment, the biopsy procedure must include an emergency control plan in the case of uncontrolled internal hemorrhage. For example, when performing a needle aspiration on the kidney, spleen or even the liver, one should not neglect to inform the patient of the existing dangers, and be properly prepared to operate immediately in the event that internal serious hemorrhage develops.

Ackerman and Del Ragato stated, "For tumors of the breast, soft tissue and bone, it is imperative that material be obtained from the area where the pathology is most likely to be demonstrated." In order to follow this dictum, it is preferable that all biopsy specimens be taken from the suspected lesion under direct vision. The only exceptions are in those instances where the danger is either too great or too late, but never for convenience alone. A successful needle aspiration biopsy of the liver can be a decisive factor in establishing an immediate decision for or against risky surgical exploration. Another example would be where a superficial mass in the neck must be preoperatively differentiated from a solid tumor, cyst or abscess. Still another example for the accepted use of needle aspiration biopsy would be in inoperable cases of breast cancer where a final diagnosis should be established for the benefit of the hospital record and as a step before any palliative therapy is administered. There are instances where a carefully performed aspiration needle biopsy of cortical bone invaded by a neoplastic lesion may be of definite assistance if adequate material is obtained; such sites as vertebrae, antrum and mandible have been subjected to needle biopsy without too great a risk to the patient. Since the new blunt-tipped needle has been devised for pleural biopsy, the pleura can now be sampled conveniently and without risk.

Surprisingly enough the lymph nodes, though easily palpable and available, are not so easily diagnosed by needle aspiration biopsy alone. In fact, even with excisional biopsy they still offer certain difficulties. The difficulties encountered

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with aspiration biopsies of the cervical, inguinal and axillary lymph glands increase in the order named. Just as with small nonfixed nodules in the breast, lymph nodes, too, are embedded in large quantities of fat and can be difficult to pinpoint to tap. Though needle aspiration, biopsy of lymph nodes may at times accurately reveal secondary metastatic carcinoma, it cannot consistently do so where Hodgkin's disease, lymphosarcoma and other related lymphomas exist. These latter diseases require excisional biopsy in order to establish their exact nature through the undisturbed cellular and architectural structure of the specimen. Where cancer is suspected in a case in which pleural or peritoneal fluid develops, a needle aspiration biopsy to establish the presence of malignant cells may be in order. Such aspirated material can be studied in two ways: either the fluid is centrifuged and stained smears are made of the sediment, or the sediment is prepared in paraffin, just as with an excisional biopsy. It should be kept in mind that mesothelial cells may be inaccurately diagnosed as cancer cells when they arrange themselves in a pseudoglandular formation and appear as multiple nuclei with mitosis. Despite this, false positives are still rather rare; false negatives will remain dependent upon the thoroughness and experience of the pathologist.

Pathologists invariably stress that in all visible ulcerated lesions, such as carcinoma of the lip, squamous and basal cell carcinoma of the skin, or malignant lesions of the oral, cervical and anal cavity, a careful excisional biopsy should be performed. They recommend that tissue for biopsy study should preferably be taken from the area most likely to show abnormal cells, pattern and general architecture; they advise that a tissue sample should be cut deep enough and yet not be cut tangentially for fear of mistaking deeper invasion of adjacent tissue. On what possible grounds then can we as surgeons go ahead with blind needle probing into a deep fibrofatty glandular organ like the breast where many forms of adjacent lumps coexist? By what possible criteria can one say that the needle point is truly in the desired portion of the buried mass; better still, how can one possibly know that the needle point is in fact in the mass itself? One should be aware of the fact that aspirates of cysts rarely contain malignant changes, and that malignant cells may be present either in the cyst wall or in intracystic papillomas. To drain a cyst and leave the cyst wall or papilloma is utterly senseless. No one can afford to act upon a false-positive report, because only one unnecessary radical mastectomy is too much for anyone's series.

In order properly to assess needle aspiration biopsy of the breast, let us ask and then answer certain pertinent questions concerning its necessity and validity in benign and malignant lesions of the breast:

1. Is a biopsy specimen obtained by needle aspiration an accurate representation of the lesion?
2. What is to be gained in time, either by the surgeon or patient by resorting to needle aspiration biopsy?
3. What advantages does needle aspiration biopsy offer the patient from the standpoint of: (1) comfort, convenience and cost; (2) morbidity, that is, hemorrhage and infection, and (3) psychic trauma.
4. If needle aspiration biopsy aids in earlier diagnosis, has it then contributed to attaining a higher five year survival rate in the hands of those who routinely employ and recommend it?
5. What is the reaction of the pathologist who renders an inconclusive, equivocal, or negative report?
6. What is the reaction of the surgeon who receives an equivocal, inconclusive or negative report?
7. What is the meaning of the term "benign" when applied to a specimen obtained by needle aspiration biopsy?
8. What are the advantages and disadvantages of routine needle aspiration biopsy?

Representative Specimen?

1. Is the Needle Aspiration Biopsy Specimen Representative of a Lesion in the Breast? Much depends on the size and mobility of the lesion and upon whether it is superficial or deeply recessed in the fibrofatty substance of the breast. The skill of the surgeon and the experience of the pathologist are also important factors, but unfortunately they are extremely variable. Small solid tumors of the breast can easily be bypassed, and aspirated material may be inadvertently obtained from an adjacent cyst. Although superficial tumors are not difficult to aspirate, deep-seated lesions do offer obstacles. Even at operation, under good light and with direct vision and palpation, it is no simple matter to isolate a

small mass. Certainly a needle embedded deep in the substance of the breast, without benefit of direct vision, with the course and direction of the needle based solely on indirect palpation, must carry with it the risk of completely missing the lesion. From the moment the needle point passes below the epidermis, the surgeon is relying more upon divine guidance than upon his own capabilities. Needle aspiration biopsy differs significantly from excisional biopsy because it is essentially a blind procedure whereby the surgeon must hope that he hits his target but cannot by the farthest stretch of his imagination be positive; herein lies the ever present danger of error. Saphir at one time favored needle aspiration biopsy of mammary lesions, but in recent years openly and completely rejected it as being redundant. Haagensen and Stout stated: "In cystic disease of the breast associated with tumor, the tumor may be so small as to be missed by needle aspiration;" and "small carcinomas may be overlooked."

An excisional biopsy in which the entire suspected mass is removed for study will avoid the following potential pitfalls in pathologic interpretation:

1. The comedo type of carcinoma is recognized by its topographic character rather than by its individual cells, which are often quite regular (Haagensen).

2. A diffuse inflammatory mass may exhibit suggestive cells on aspiration biopsy (plasma cell mastitis). The point of a needle may completely fail to enter the tumor mass; and if it does enter the mass, no aspirate may be obtained. When material is successfully aspirated, it may or may not be truly representative of the lesion.

3. Not infrequently, cells considered questionably malignant or atypical are present in material aspirated from a benign tumor of the breast; examples are ductal hyperplasia and papillary cystadenoma. Usually the final determination of the presence of a malignant tumor in a papillary cystadenoma depends upon carefully studied multiple sections. Small cell type of carcinoma with single cells, embedded in a dense fibrous matrix, is not easily recognized on aspiration biopsy. In the past, sclerosing adenosis looked and was considered malignant. Today it is considered benign.

4. In certain rare instances thyroid metastasis will appear as normal thyroid tissue. Proof of the malignant nature is the fact that patients die from this form of metastasis.

5. Papilloma or papillomatosis may suggest carcinoma, and conversely papillary carcinoma may superficially resemble benign papilloma.

Saphir stated: "From my experience, a needle aspiration biopsy of a breast cyst is not indicated. It is only extremely rare that a cyst disappears and hence it would have to be removed anyway, regardless of what the aspirated fluid shows. Besides, what appears as a cyst may be an edematous fibroadenoma. I am in perfect agreement with you that a mastectomy should not be performed on the basis of findings in the fluid of a few malignant looking epithelial cells." Popper stated: "If cyst material is available it should by all means be examined, but that a final decision be postponed until surgical biopsy confirms the diagnosis."

Time Factor

II. What is to Be Gained in Time by Needle Aspiration Biopsy of the Breast? Does a needle biopsy really save time, or does it lead to needless and possibly harmful delay? Popper stated: "In my opinion almost every examination based on cytology should be considered to give tentative results—to be confirmed, if at all possible, by a definitive method. I do not doubt the tremendous advantage of cytology, but quite often deviation from the principle outlined above led to unpleasant complications. I therefore would feel that if cyst material becomes easily available, it should by all means be examined, but that a final diagnosis be postponed until surgical biopsy confirms the diagnosis. This obviously makes the needle biopsy redundant."

It is apparent that needle aspiration biopsy actually results in delay, with an unnecessary loss of time, and that radical mastectomy must be postponed until an excisional biopsy can be performed and a definitive pathologic diagnosis established. Calderin, in a personal communication, stated: "This biopsy (needle aspiration) is of value only in large, palpable, advanced carcinomas where an official diagnosis is necessary for the hospital record." Those who advocate needle aspiration biopsy for the diagnosis and treatment of mammary cysts readily admit the recurrence of cystic fluid after a second, third, or even a fourth aspiration. Patients who require and those who do not require reaspiration must still be periodically observed for recurrence and possible malignant change. Cysts that refill after two aspirations are usually removed surgically as are cysts that reveal blood or blood-tinged secretion.

When a mass recurs several months after

needle aspiration, one can no longer be sure of what is happening in the breast; one must either consider that the cyst has refilled, or that a new mass has formed. When intracystic hemorrhage develops as a result of needle point trauma during the initial aspiration, and reaspiration becomes necessary, the withdrawal of bloody fluid can only result in further equivocation and delay. The answer to the question, "What is to be gained in time by needle aspiration biopsy of the breast?" must be, "Time is not gained—it is lost!" Today delay in diagnosis and deferment of definitive treatment still remain outstanding factors in preventing further improvement of our current five and 10 year survival rates. Shimkin and Darland have much to say on this subject.

Advantages to Patient

III. What Advantages Does Needle Aspiration Biopsy Offer the Patient from the Standpoint of (1) cost and convenience, (2) morbidity, hemorrhage, infection and pain; (3) psychic trauma, fear, anxiety and cancerphobia.

A patient should never be made comfortable with a false sense of serenity secured only by a benign report based on a needle aspiration biopsy. To collapse a cystic mass in the breast by removing its fluid and then assure the patient against the presence of carcinoma is like administering morphine for an intractable tuberculous cough and assuring the patient that she is now cured of the disease. Picture if you can, a woman visiting her doctor for a lump in the breast; he aspirates a cyst, which promptly disappears; then the patient returns a month later with a recurrent lump in her breast. Can you imagine telling a woman who is already depressed and distressed that it is now necessary for the tumor to be removed surgically? This sequence of events involves loss of time, extra cost and probable irremediable psychic trauma to the patient.

As regards the loss of one or two months, let me reiterate that it should be the goal of every physician to discover premalignant or malignant lesions of the breast as early as possible. The interval between discovery of the lump and the patient being seen by the doctor should remain under three months and preferably only one. Shimkin and his associates in 1952 commented that if patients delayed only one month or less before coming in for treatment, a five year survival rate of 60 per cent could be attained. This 60 per cent refers to an overall percentage which would mean a 20 per cent improvement over current statistics, and a 40 per cent increase over the existing 20 per cent of five year survivals with untreated carcinoma of the breast. Darland stated that in the first three months the percentage of carcinomas of the breast without axillary involvement is at its highest. After three months there is an ever increasing rise in the incidence of axillary involvement. A prompt excisional biopsy correctly performed entails less psychic trauma to the patient, no inconvenience to the surgeon and ultimately less cost to the patient; most important of all, the loss of one or two critical months is eliminated in the event that classic radical mastectomy is indicated.

Several serious and unfortunate complications may follow needle aspiration biopsy. Intramammary hemorrhage may result from the puncture of dilated vessels surrounding a breast lesion. It is common for a needle point to traumatize a cyst wall and produce intracystic hemorrhage. When the cyst refills (with or without blood) it usually becomes firmer and presents a new problem, compounded by additional ambiguity and indecisiveness. It is here that surgical biopsy offers the only safe and logical solution. Infection is not an infrequent complication resulting from blind needle probing of the breast. The abscesses that develop require incision and drainage; and the chronic draining sinuses that ensue usually have to be excised.

Szanto effectively summed up the question of "cost and convenience" by stating: "Aspiration biopsy of cystic lesions of the breast is a diagnostic method without any value. It is a waste of time, money and effort. It does not replace excisional biopsy for the final evaluation of the case . . . in our opinion, the excisional biopsy cannot be replaced by other methods for the exact evaluation of the nature of tumors of the breast."

Accuracy and Reliability

IV. What is the Accuracy and Reliability of Needle Aspiration Biopsy? A study was made at Memorial Hospital in New York City of 1,406 women who had undergone radical mastectomies for primary operable carcinoma of the breast. Four groups were established:

Group I: Patients with obvious carcinoma of the breast (surgeon decided not to obtain a biopsy specimen).

Group II: Patients suspected of having carcinoma of the breast (needle aspiration biopsy performed).

Group III: Patients with suspect benign lesions which after surgical biopsy revealed carcinoma.

Group IV: Patients who had undergone various diagnostic procedures before mastectomy (incisional, excisional, aspiration, slides from other hospitals, and cell block preparations).

Nine hundred and thirty-four cases representing the first three groups were studied.

Group II: 543 had needle aspiration biopsy (133 required a combination of aspiration and surgical biopsy).

Group III: 258 had local excisional biopsies.

The writers stated: "Needle aspiration biopsies were done on cases that clinically looked like carcinoma, whereas local excision was performed on cases that clinically appeared benign."

Of the 543 cases in Group II, in which the lesion was suspected as carcinoma, a needle aspiration biopsy was performed; 133 (24 per cent) required an additional surgical biopsy to establish the diagnosis. One of every four aspiration biopsies had to be finally substantiated by excisional biopsy; 24 per cent of negative or inconclusive results in the experienced hands of the foremost proponents of needle aspiration biopsy makes this procedure in my opinion unreliable for diagnosis of breast carcinoma. Imagine if you can what anxiety and apprehension this group of women must have suffered from the multiple procedures, and the awaiting of multiple reports before the need of radical resection of the breast was made known.

Effect on Survival Rate

V. If Needle Aspiration Biopsy Aids in Earlier Diagnosis, Has It Then Contributed to the Attainment of a Higher Five Year Survival Rate? In a paper from Memorial Hospital in New York City, by Robbins, Brother, Eberhart and Quan, entitled, "Is Aspiration Biopsy of Breast Cancer Dangerous To The Patient?" two conclusions are germane to this question: (1) aspiration biopsy is not dangerous to the patient, and (2) needle aspiration biopsy has had no effect upon long term survival rates in their patients with cancer of the breast.

Reaction of Pathologist

VI. What Is the Reaction of the Pathologist Who Renders an Equivocal, Inconclusive or Negative Report? It is not a happy one. See personal communications of Drs. Saphir, Popper and Szanto. In the final analysis a negative pathological report based on material obtained by needle aspiration means only one thing; cancer cells were not seen. It does not mean that the patient is free of cancer. And a positive report also means only one thing—cancer is suspected—but an excisional biopsy must finally establish the diagnosis.

Reaction of Surgeon

VII. What Is the Reaction of the Surgeon Who Receives an Equivocal, Inconclusive or Negative Biopsy Report? The surgeon, being completely responsible for his patient at all times, cannot afford any errors either of omission or commission. The correctness of his judgment and work is constantly exposed to critical evaluation. In other words, the surgeon, both for the patient's sake and for his own, can ill afford to err. He must therefore strive to reduce to the minimum his percentage of errors in judgment and surgical technic. The only way he can attain this goal is to be well informed, critical in his evaluation and conclusions, logical and levelheaded. As a routine habit, he must move slowly and think fast. If he must err, it should always be on the side that benefits the patient. This question is best summed up by Popper, who stated: "In my opinion, almost every examination based on cytology should be considered to give tentative results to be confirmed, if at all possible, by a definitive method . . . that a final decision be postponed until surgical biopsy confirms the diagnosis." The reaction of the surgeon who receives such a report is usually that of confused annoyance. He must be patient and wait until the pathologist carefully examines the excised biopsy and submits his final report. Thus it can be seen that it does no good, nor does it save time to transfer the uncertainty of a needle specimen biopsy to the pathologist who in turn has to retransfer the uncertainty of his pathological diagnosis to the surgeon. The great harm lies in the fact that the patient's life and well-being are made dependent on one uncertainty piled on another.

Benign Specimen Reported

VIII. What Is the Meaning of Benign Report On a Specimen Obtained by Needle Aspiration? "When the diagnosis of carcinoma is made, there should be no doubt about the correctness of the diagnosis. To compromise will lead to radical mastectomy for a benign lesion,

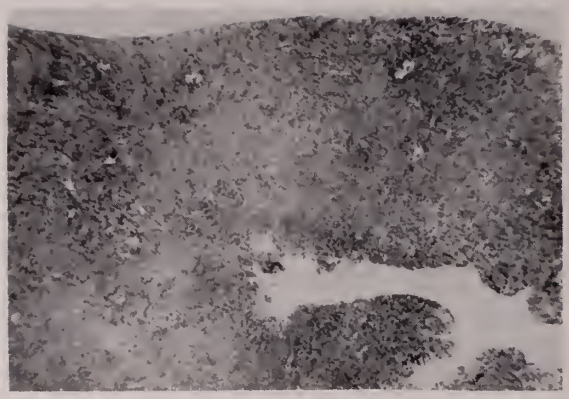

Fig. 1. — Sinus tract surrounded by wide zone of suppurative inflammation showing focal abscess formation.

Fig. 2. — Multiple cysts. Central cyst shows one margin of papillary excrescences of intraductal carcinoma.

and only one radical operation for a benign lesion is too much for anyone's series."

"The surgeon must not remove a breast without being completely certain of his diagnosis. On occasion where a frozen section may not reveal the true diagnosis (i.e.) inflammation, proliferative changes, or well differentiated carcinomas (i.e., well differentiated intraductal papillary carcinoma) it is best to remain conservative and wait. The surgeon should close the biopsy wound, return the patient to her room, and patiently await the final pathlogical report. No more than one or more days will be lost. The surgeon who proceeds with radical mastectomy because he intuitively feels it is not safe to wait for a definite diagnosis, uses faulty judgment indeed, and opens himself to severe and serious criticism. A delay of one or two days or even longer will in no way impair the patient's chance for attaining the best possible result."

Brief summaries of three illustrative cases are presented:

Report of Cases

Case 1.—A woman, aged 39, had been under the care of a physician who diagnosed a suspect cyst in the right breast and promptly aspirated it. The aspirate was reported as normal. The treated cyst became infected, requiring incision and drainage. When I saw the patient several months later, the right breast revealed a chronic draining sinus tract that had resisted healing since the original incision and drainage. Wide excision of the involved portion of the breast was performed, and recovery was uneventful (fig. 1).

Case 2.—A woman, aged 48, complained of "lumpiness" in the breast. Her physician aspirated the suspected cyst. The cytologic report was normal. After one month the cystic swelling recurred. An excisional biopsy was performed and the pathologic diagnosis was premalignant changes within the walls of the cyst. Simple mastectomy was performed (fig. 2).

Case 3.—A woman, aged 51, had a large cyst of the right breast, which was repeatedly aspirated. After the second recurrence, an excisional biopsy was performed and the pathologic diagnosis was carcinoma adjacent to the wall of the cyst. A classic radical mastectomy was performed (fig. 3).

Case 4.—A woman, aged 60, presented a mass in her right breast. A needle aspiration biopsy was performed and the specimen sent to the pathologist. The report was equivocal with a recommendation for surgical excisional biopsy. The patient was referred to me for surgery, but she refused. She returned one and one-half years later with an obvious carcinoma emerging from the breast through the sinus tract created by the previous needle aspiration site. The patient again refused surgery (figs. 4, 5).

Discussion

Since the introduction of mammography by Solomon in 1913 and Warren in 1930, Leborgne in 1953, perfected a roentgenographic technic for visualizing soft tissue structure of the breast. Gershon-Cohen of Philadelphia is largely responsible for popularizing mammography in this country. In the years 1937 to 1948, he helped make significant strides in establishing improved roentgenographic technics and better criteria for diagnosing breast lesions. He was the first to demonstrate the feasibility of diagnosing 'occult' (nonpalpable) carcinoma of the breast. From 1948 to 1963, Gershon-Cohen was the foremost advocate for mammography as a routine procedure. It is hoped that mammography will ultimately help to detect neoplasms of the breast long before they become clinically manifest by palpation.

Egan and Dodd, in a report to the American Roentgen Society (October 1960), stated that carcinoma of the breast was diagnosed in 238 out of 245 patients without benefit of the patient's history or findings. Two of seven misses were off-limits, that is, the breast lesion was either too far laterally (axilla), or too far medially (sternum). In a later series, Egan reported on a routine series of 2,522 mammograms interpreted without benefit of clinical findings. Five hundred

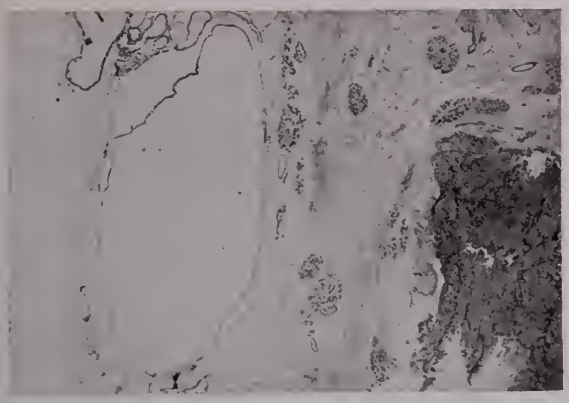

Fig. 3. — Low power view of cyst adjacent to malignant tumor of breast.

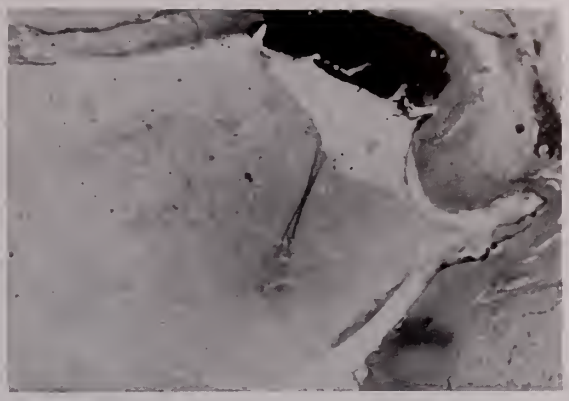

Fig. 4. — Low power small carcinoma outside cyst wall.

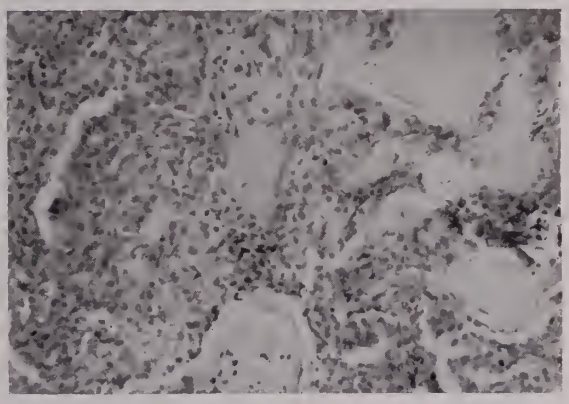

Fig. 5. — High power carcinoma of breast, seen in figure 4.

and one of 518 (96.7 per cent) proved cases of carcinoma of the breast were correctly diagnosed; and 351 of 383 (91.6 per cent) proved cases of benign lesions were reported correctly. In 58 instances (2.3 per cent) mammography was able to detect early carcinoma in clinically unsuspected patients. Gershon-Cohen, Egan, and Widrich advocated that the most effective application of mammography is obtained by teamwork, namely, that the surgeon must combine the objective findings of the roentgenologist and pathologist with his own clinical experience before proceeding with definitive management.

While strongly advocating mammography, one must not become oblivious to its disadvantages. The lay public, as well as the physician, may be under the misapprehension that x-ray invariably makes the diagnosis and that when a benign lesion is diagnosed, nothing need be done about it. It must be stressed that though mammograms offer a high degree of diagnostic accuracy, they still carry with them a significant percentage of false positives and false negatives that vary with the type of breast, technic, and the experience of the roentgenologist (figs. 6-10). It would be a grievous error indeed to be unmindful of these disadvantages. Gershon-Cohen, Egan and Widrich advocated mammography as a valuable ancillary diagnostic aid, but strongly admonished that as with x-ray studies elsewhere mammography in itself cannot and must not make the final diagnosis. So long as x-rays are about 95 per cent accurate in diagnosing malignant lesions of the breast, and only about 91 per cent accurate in benign lesions, one cannot rely solely on roentgenology; it would be equally as calamitous to remove a breast on the strength of a false-positive report as it would be not to remove it on the basis of a false-negative report.

For many years I have decried the use of needle aspiration biopsy as a substitute for excisional biopsy in diagnosis of breast carcinoma. I have repeatedly pointed out the serious disadvantages of such a blind procedure. Thanks to their persistence such pioneers as Gershon-Cohen, Leborgne and Egan and Dodd perfected the technic of mammography and made it possible to add roentgenography to our armamentarium for diagnosing neoplasms of the breast. It is hoped that with continued improvement in mammographic technic and experience, precancerous or 'occult' (nonpalpable) cancerous lesions will be recognized earlier; and that treatment will be offered sooner with the following advantages: (a) Periodic x-ray studies will offer the postoperative patient protection against a 6 per cent involvement of the opposite breast; (b) an earlier diagnosis (less than three months) means less possibility for axillary or sternal extension and

Fig. 6a. — Right breast. Lesion is a 4 by 3 cm. mass, irregular and ill-defined. Some fine calcium deposits noted.

X-ray Diagnosis: Carcinoma; recommend excision biopsy. At surgery biopsy revealed adenocarcinoma; a classical radical resection was carried out.

Fig. 6b. — Left breast shows homogenous vascular markings but no evident mass is detected.

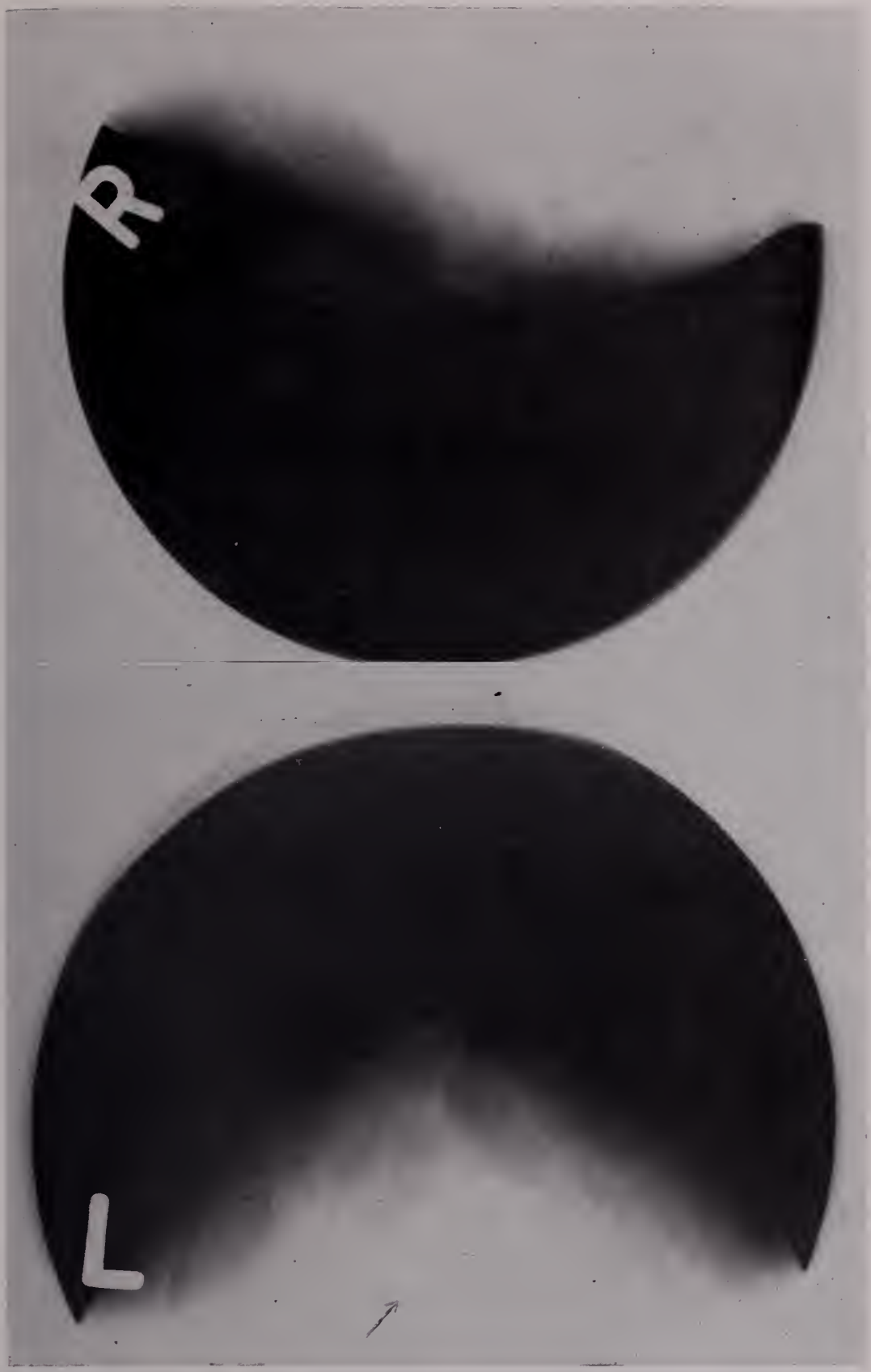

Fig. 7a. — Right breast—no evident mass is visualized.

Fig. 7b. — Left breast. Lesion is deep with smooth surface. No spiculation and no calcification.

X-ray Diagnosis: Fibroadenoma; recommend excisional biopsy. At surgery biopsy revealed fibroadenoma.

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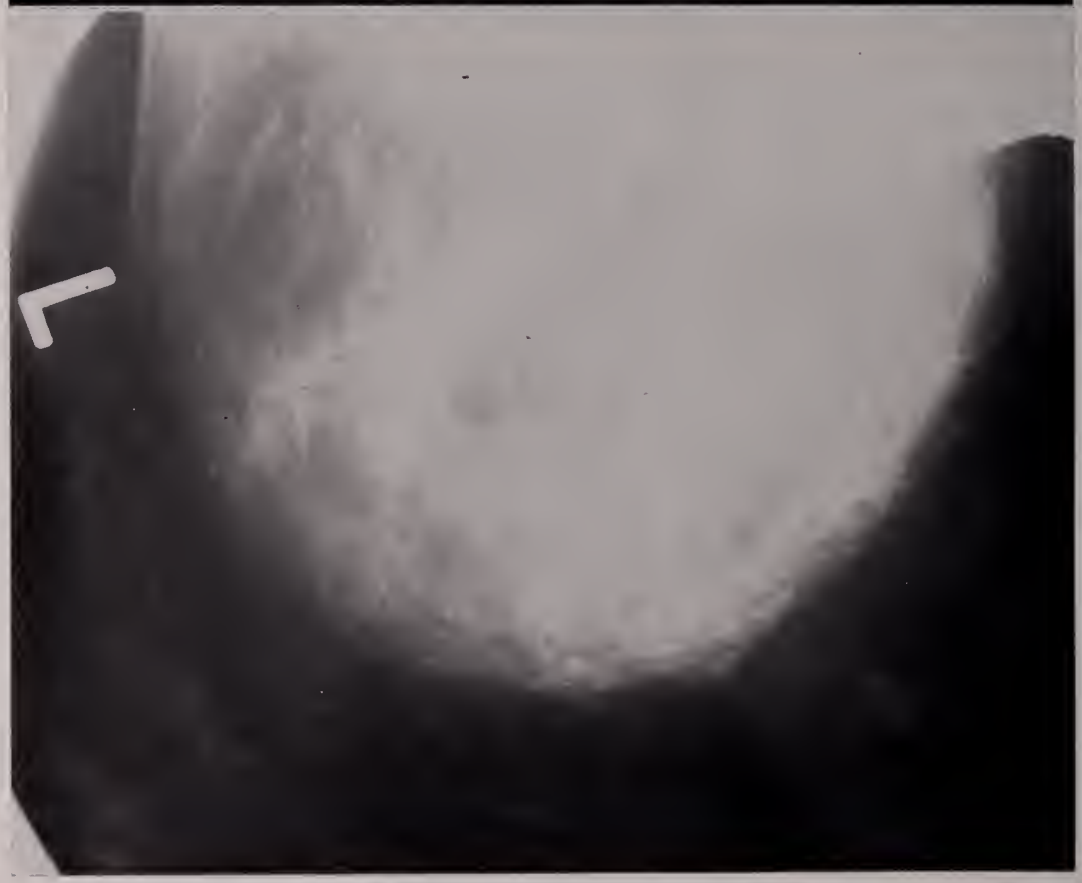
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under three months should improve the five and 10 year statistics; (c) ultimate eradication of radical and superradical surgery; (d) elimination of postoperative chemotherapy; and (e) a great impetus to the progress in the prophylaxis or prevention of carcinoma of the breast.

Summary

A needle aspiration biopsy specimen of the breast may not be representative of the lesion.

Small and early carcinomas of the breast can easily be bypassed and aspirated material from an adjacent cyst inadvertently obtained.

Needle aspiration is a blind procedure and even in trained hands may give a negative, indecisive, or equivocal result in about one out of four cases (24 per cent).

Needle aspiration biopsy is not an aid to early diagnosis, nor has it contributed to a higher five year survival rate.

Needle aspiration biopsy does not save time; actually it may lead to unnecessary delay and loss of time.

The morbidity rate is increased by needle aspiration biopsy; hemorrhage, inflammation, abscess formation and chronic draining sinuses are not infrequent complications, and subsequent surgical intervention is required in all instances.

The patient is often made uncomfortable, kept in a state of false security, forced to spend more money, and exposed to infinitely greater psychic trauma.

The surgeon must proceed on a definitive diagnosis—not on a tentative one. Because the surgeon can ill afford to err (for example, to perform a radical resection of the breast for a benign lesion or to delay operation for a missed carcinoma too long), he must avail himself only of foolproof methods and technics.

A surgical biopsy of all suspected lesions of the breast offers the surgeon a routine procedure that is as close as possible to 100 per cent accuracy and safety.

Opposite Page

Fig. 8a. — There is a symmetry of architecture bilaterally, except for small area in the inner quadrant of right breast. This area is irregular and contains no calcific particles.

X-ray Diagnosis: Suspect adenosis or papillomatosis; recommend excisional biopsy. At surgery biopsy revealed intraductal papilloma, benign.

Fig. 8b. — Left breast reveals fibrovascular markings but no evidence of a suspicious mass.

Fig. 9. — Right breast shows smooth anterior margin with radiolucent halo.

X-ray Diagnosis: Fibroadenoma; recommend excisional biopsy. At surgery biopsy revealed fibroadenoma. Left breast revealed normal x-ray findings.

Fig. 10. — Left breast shows irregular area of increased density in upper quadrant. No calcific spicules noted.

X-ray Diagnosis: Carcinoma; recommend excisional biopsy. At surgery biopsy revealed adenocarcinoma; a classical radical resection was performed. Right breast revealed normal x-ray findings.

All lesions reported as benign after needle aspiration biopsy should be submitted routinely to excisional surgical biopsy for final substantiation.

The quickest, cheapest and most reliable method of diagnosing any lesion of the breast is surgical excisional biopsy.

In cases of advanced carcinoma of the breast in which excisional biopsy is contraindicated or the patient's physical condition obviates general anesthesia, needle aspiration biopsy serves two useful purposes: (a) it establishes a diagnosis prior to radiotherapy, and (b) it benefits the hospital record.

Mammography is an accurate roentgenological procedure capable of contributing to a better diagnosis in diseases of the breast, and it is conceiv-

able for mammography, where properly employed, to contribute to a higher five year survival rate.

It is emphasized that mammography is being recommended as an adjunct to—not as a replacement of—present methods of clinical evaluation, excisional biopsy and microscopic study. More important, it is being emphatically advocated as a substitute for needle aspiration biopsy of the breast.

It is hoped that the routine employment of mammography in questionable breast problems will ultimately replace the needle aspiration biopsy of the breast.

References are available from the author upon request.

I wish to express my gratitude to Drs. Hans Popper, Otto Saphir, Paul B. Szanto, Jerome Benson, Victor Calderin and Jack Widrich for their invaluable personal assistance, without which this paper could not have been written.

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Enzymatic Control of Surgical Trauma in Urologic Patients

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Postoperative edema is of critical significance when it interferes with apposition of tissues or when it embarrasses circulation, blocks wound drainage or impairs organ function. In urologic patients all of these factors may come into play during the postoperative recovery period. Careful control of bleeding and gentle handling of the tissues during surgery are of paramount importance. In addition, anti-inflammatory medication has been recommended in the form of enzymes.

The exact value of enzyme therapy is difficult to estimate. In our study of the literature we found no documented reports on its value in urologic surgery. We also were concerned with the risk of enzymatic interference with fibrinolysin and blood clotting, especially in transurethral resections. Furstenberg[1] made extensive blood and serum analyses of prostatic surgical patients. Postsurgical bleeding occurred especially when the serum contained free proteolytic enzymes preoperatively — presumably originating from prostatic cells — while at the same time the clotting and prothrombin times were prolonged. In this respect it is worth noting that trypsin and papain strongly promote thrombin formation,[2] and that in the presence of a blood-clotting disturbance, their actions with regard to coagulation are unpredictable. On the other hand, chymotrypsin does not activate[3] the plasminogen - plasmin (profibrinolysin-fibrinolysin) system and does not destroy circulating prothrombin; in therapeutic dosage it causes no fibrinogenolysis.

In order to ascertain the merits of enzyme therapy in urologic cases, we arranged a double-blind controlled study in which a pure chymotrypsin preparation (Avazyme*) was compared with a placebo. The following describes the observations.

Materials and Method

We used enteric coated tablets of 20 mg. crystalline chymotrypsin and placebo tablets identical in size and appearance. The identity of the tablets was not known to us or the patients during the study. Appropriate antibiotic therapy was used when indicated.

Unselected patients were treated by random administration of active medication or of placebo. Dosage was one tablet four times daily, beginning immediately after surgery, or when a definitive diagnosis was made. Duration of therapy was four to eleven days, usually seven, and observations were made at frequent intervals. Diagnoses encountered in the study group were:

Benign prostatic hypertrophy, transurethral resection (TUR)	11
Carcinoma of prostate, TUR	2
Carcinoma of prostate, bilateral orchidectomy	1
Carcinoma of bladder, TUR	1

*Avazyme Tablets, 20 mg. crystalline chymotrypsin (50,000 Wampole Units), supplied by Wampole Laboratories, Stamford, Conn.

Epididymitis, with and without cellulitis	8
Epididymo-orchitis	1
Chronic urethral stricture	2
Hydrocele, phimosis, congenital stricture of urethra	1
Urethral calculus	1
Cystitis, chronic urethritis	1
Hypospadias	1
Phimosis or paraphimosis	2
Redundant prepuce	3
Spermatocele	1
Bilateral vasectomy	2
Bilateral reanastomosis, vasa deferentia	1
Stricture of ureter	1
Ureteral calculus	3
Nephroureterolithiasis	1
Multiple scrotal sebaceous cysts	1
Incision and drainage of urinary extravasation from TUR	1
Total	46

Ages varied between one year and 90 years. The study included 45 male patients and one female.

Results

Upon completion of the study, the 46 cases were classified in two groups: (a) those situations regarded as relatively complicated, involving considerable trauma and in which antibiotics were prescribed as a matter of routine, and (b) relatively simple procedures uncomplicated by infection, in which antibiotics were not used. Tables 1 and 2 illustrate the over-all results obtained in each category. Results were classified as good when postoperative edema and pain were either prevented or held to a lesser degree than could, in our experience, reasonably have been expected to follow the surgical procedure.

Table 1. — Therapy with Concomitant Use of Antibiotics

Medication	No. of Cases	Results	Diagnoses
Chymotrypsin Antibiotic	11	Good— 9 (81.8%)	Benign prostatic hypertrophy—TUR 2 Epididymitis (3) Nephroureterolithiasis Ureteral calculus Incision and drainage of urinary extravasation Bilateral reanastomosis of vasa deferentia
		Poor— 2 (18.2%)	Epididymitis with benign prostatic hypertrophy and hemophilia Chronic urethral stricture
Placebo Antibiotic	17	Good— 7 (41.2%)	Carcinoma of prostate—TUR Epididymitis—cellulitis—(2) Epididymo-orchitis Stricture of ureter Chronic urethral stricture Multiple scrotal sebaceous cysts
		Poor—10 (58.8%)	Carcinoma of Prostate—bilateral orchiectomy Benign prostatic hypertrophy TUR (6) Epididymitis Urethral calculus and acute epididymitis Cystitis, chronic urethritis

Table 2. — Therapy Without Antibiotics

Medication	No. of Cases	Results	Diagnoses
Chymotrypsin	9	Good—8 (88.8%)	Bilateral vasectomy (2) Redundant prepuce Phimosis Benign prostatic hypertrophy—TUR (6) Ureteral calculus (2) Hypospadias
		Poor—1 (11.2%)	Redundant prepuce, meatal stenosis
Placebo	9	Good—4 (44.4%)	Paraphimosis Hydrocele, phimosis, congenital meatal stricture of urethra Spermatocele Mumps epididymitis
		Poor—5 (55.6%)	Carcinoma of prostate—TUR Benign prostatic hypertrophy—TUR (2) Benign prostatic hypertrophy, carcinoma of bladder—TUR of prostate and bladder tumor Redundant prepuce

Resolution of established cellulitis in patients with epididymitis was notably good. Rather remarkable results were obtained if chymotrypsin was started early in the disease process. Postoperative inflammatory edema was well controlled in patients having penoplasties, scrotal procedures, hypospadias repair, circumcision, hydrocele and urethroplasty. Because of the minimal amount of edema, complaints of pain were either greatly reduced or absent in the chymotrypsin series.

Chymotrypsin per se in our TUR series did not prevent the occurrence of fever. The combined use, however, of chymotrypsin and an antibiotic was associated with either absence of fever or rapid reduction of fever when present. On the other hand, fever occurred in the majority of cases where an antibiotic alone was used and temperatures tended to remain elevated longer.

No side reactions were noted. One patient on several other medications experienced nausea; this was transient and the full course of the drugs was finished without further incident.

Bleeding problems in patients immediately following transurethral resections did not occur. We do not believe bleeding to be a complication of oral chymotrypsin therapy.

Comments

With the results of this study we are convinced that chymotrypsin has a definite place in our management of postoperative urologic patients. Recently Allaben, Posch and Larsen[4] published controlled studies with experimental trauma in monkeys. They demonstrated the effectiveness of intramuscular chymotrypsin and found that the first day's dosage is the most important. They suggested that pretreatment with chymotrypsin might limit edema even further. We are now using chymotrypsin tablets prophylactically in situations where tissue trauma and prolonged instrumentation are anticipated.

In our plastic procedures of the scrotum and penis, the value of oral chymotrypsin paralleled the good results obtained by Bogner and Snyder.[5] Excellent results were obtained in patients with epididymitis.

Following adequate transurethral resection of the prostate varying amounts of irrigation fluid, blood and urine are presumably trapped within the prostatic capsule, periprostatic tissues and occasionally perivesically and juxtaperitoneally. The accumulation makes a good medium for the ever present bacterial horde. Possibly its mobilization and more rapid resolution can be brought about by chymotrypsin therapy, as our good results would suggest. Chymotrypsin further appeared to facilitate in our patients the action of simultaneously prescribed antibiotics.

Summary and Conclusions

Our double-blind evaluation of oral crystalline chymotrypsin (Avazyme) in the treatment of 46 urologic patients permits the following conclusions:

Postoperative inflammation and edema with attending pain were either minimized or more promptly resolved. With the active enzyme favorable observations (that is, better than one would normally anticipate) were made twice as frequently as with a placebo control in situations both with and without concomitant antibiotic therapy.

Subjective comfort was greater in the group on chymotrypsin therapy.

Bleeding problems did not occur following TUR. We are confident that oral therapy with crystalline chymotrypsin will not increase the postoperative bleeding tendency in these patients, whereas it must be considered a definite risk if enzymes are used which activate the plasminogen-plasmin (fibrinolysin) system.

Response in epididymitis was remarkably good, especially when the oral chymotrypsin was started early.

References

1. Furstenberg, H.: Fibrinolyse in der Urologie (Fibrinolysis in Urologic Practice), J. Int. Coll. Surgeons 38:268-272, 1962.
2. Alexander, B.: Blood Coagulation and Thrombotic Disease, Circulation 25:872-890 (May) 1962.
3. Sherry, S., and others: The Enzymatic Dissolution of Experimental Arterial Thromhi in the Dog by Trypsin, Chymotrypsin and Plasminogen Activators, J. Clin. Invest. 33:1303-1313 (Oct.) 1954.
4. Allaben, R. D.; Posch, J. L., and Larsen, R. D.: An Experimental Evaluation of the Efficacy of Chymotrypsin in the Reduction of Edema in Crushed Extremities, J. Bone & Joint Surg. 44-A:41-48 (Jan.) 1962.
5. Bogner, R. L., and Snyder, C. C.: High Dosage Oral Chymotrypsin as an Adjunct in Plastic Surgery, J. Int. Coll. Surg. 37:289-295 (Mar.) 1962.

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(Dr. Noah) Present Address

Psychological Adaptation of Man to Unusual and Stressful Environments

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Man has already made successful relatively short term space flights and in the near future, the duration of the flights will be extended to more prolonged periods of time. Interest mounts regarding the physiological and psychological stresses which the astronaut will be required to endure with these extended space missions. This report is concerned with the psychological stresses of exposure to constant danger, isolation, confinement, monotony and sensory deprivation. All of these are to be anticipated in prolonged space flights.

In addition to the clinical literature and laboratory studies concerning isolation, much interest has been directed toward biographical and anecdotal accounts of human experiences in unusual environments. One of the most vivid and detailed reports of this latter sort is reported in Richard E. Byrd's "Alone"[1] in which he reports four and a half months' lone existence at Bolling Advance Weather Base in the Antarctic. In this paper an effort is made to describe his experience, psychological reactions and the implications of these findings for space travel.

This sort of approach in the study of isolation and sensory deprivation has both advantages and disadvantages. Byrd's isolation differed from the laboratory situation in that it was realistically enforced by the severity of the Antarctic winter. In contrast to experimental isolation, in case of an emergency, he could not readily terminate his mission.

The inherent disadvantage in this approach is that one is totally dependent on subjective reporting of the individual. Both consciously and unconsciously he screens the reported material and partially excludes or modifies the data. Despite these limitations, Byrd's story represents a rich source of information and in approaching the difficult task of predicting the human response to a totally new environment no data must be overlooked.

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Read before the Florida Medical Association, Ninetieth Annual Meeting, Hollywood, May 9, 1964.

Description of the Situation at Advance Base

The base was established on the Ross Ice Barrier located 123 miles from Little America. It was the first inland station ever manned during the Antarctic winter night. Byrd began his vigil in late March of 1934, only a few weeks before the beginning of the long continuous Antarctic night. His quarters consisted of a small underground shack roughly the size of an average bedroom. In addition, a series of connecting tunnels was dug in the snow for storage purposes. The people stationed at Little America could talk to Byrd by radio, but he could respond to them only by Morse code. With the onset of the severe cold, at times in the minus '80s, and darkness in the Antarctic winter, in case of an emergency it would be virtually impossible to reach Byrd for a period of several months.

Responses to the Situation

At first Byrd did not experience loneliness to any significant degree. The weather observations and recordings almost totally occupied his thinking, but gradually these activities became monotonous and his loneliness grew. Because he had to make weather observations almost every hour, at times he felt that the instruments, not himself, were masters of the situation. Byrd felt that if he were to survive and maintain his senses in this unusual and stressful environment, he must draw from his inner resources and learn to live with himself. He felt that in order to have peace and harmony he must control his thinking and direct his actions. This was a persistent challenge since memories of the past kept creeping into consciousness. At first, when the time of total darkness came, he denied any reaction to the loss of light, but later he openly craved the light and the presence of living things.

While at Advance Base he saw dramatic reflective phenomena in the sky in the form of parhelia and mirages. At first these phenomena were seen as natural occurrences and were actually enjoyed. Later, however, he made these experiences more personalized and projected meaning into

them. Several times, while looking at unusual stars, he momentarily believed that someone was attempting to send a message to him.

In order to fight boredom, loneliness and extreme coldness, Byrd attempted different maneuvers. He became very orderly and planned his activities so he would spend only a short time at one thing. Also, he kept a daily diary in order to give added meaning to what he was doing. So that he might obtain additional stimuli which he needed, he allowed himself a limited amount of fantasy and imagined the presence of familiar people and places. He felt if he allowed too much fantasy, he would lose proper respect for the ever present danger about him. Thus, he continued his disciplined censorship approach and attempted to wall himself off from the past.

His struggle to obtain a sense of detachment from the rest of the world was partially successful, but with it came a serious conflict. Being unable to cathect the frustrated libidinal-aggressive energy onto people or things, he unconsciously turned it inward and recurring episodes of depression appeared. In order to decrease the depressive feelings he became more introspective in order better to understand the universe and himself. This was an intellectual approach to an emotional conflict and it was unsuccessful. Part of the depressive symptoms were probably caused by carbon monoxide intoxication from the fumes of the stove and lantern. Byrd was unable to recognize this and perhaps his denial of their toxicity was related to the fact that these objects gave him the badly needed heat and light.

On May 4, after approximately 64 days at Advance Base, Byrd was acutely overcome by carbon monoxide fumes from an ill-functioning motor. Following this experience he was violently ill for the next few days, but although he was extremely weak, he continued to carry out his scientific weather observations.

He realized the seriousness of carbon monoxide poisoning and became quite despondent. Several times he was almost ready to give up, but by calling on hidden inner resources he regained his positive hope for survival. He strongly believed, though, that he must actively work for life and that inner harmony would come only if he could constructively endure this hardship.

During his subsequent radio contacts with the men at Little America, he did not tell them of his illness. He feared that they would endanger their own lives by attempting a rescue trip to him in the severest phase of the Antarctic winter. One of the men did suspect Byrd was ill and persuaded the others to investigate. Without revealing their real reason for making the trip to him, after two failures because of weather, the group finally reached Byrd. He and his men remained at Advance Base for an additional two months so that he might recuperate. During this time the men did not ask, nor did Byrd volunteer to tell of his experiences. This reluctance to share his experience was related to his feelings of shame over his "flimsiness," inability to accept the idea he had been rescued and a desire to preserve leadership. That Byrd had difficulty in telling others of this experience is further illustrated by the fact that it was four years later before he wrote "Alone" in which he vividly portrays the experience.

Similarities Between Byrd's Experience and Space Explorations

As with the planned space explorations, Byrd's adventure was the first of its kind with a man living for a prolonged period in an isolated, unfamiliar, hostile environment. Because of limitations of space and supplies the number of occupants was limited and there was an element of confinement. In both situations, that of space and the Antarctic, ever present danger exists. This calls for a high degree of watchfulness and alertness. There is the additional hazard that with danger being constantly present, it is extremely hard to maintain a healthy respect for the danger. One tends to acquire a false sense of security and thereby can be readily overcome by the hostile environment. With extended isolation, even in the presence of one or two other people, one experiences varying degrees of loneliness. During this time the person finds out things regarding himself that he has never known before. The external world no longer gives him the usual degrees of changing stimuli and he is more and more aware of his own inner thoughts and feelings. This awareness necessitates his tolerating these unique thoughts and feelings. If he is unable to accept himself under these circumstances, he may become anxious or overwhelmed with conflicts resulting in irrational and impulsive moves which will terminate the mission. In space, as it was at Advance Base, a person will see strange sights never seen previously by other men. He will be given ample opportunity to project meaning into these sights and react to them, perhaps in an adverse manner. In space there will be a change in the

day-night cycle. At times there will be total darkness and at other periods there will be total light. In either instance the person will not be exposed to the 24 hour cycle as is experienced normally. At times the day's work may consist of many monotonous, boring duties with a rather constant demand for monitoring of equipment. Extreme temperature variations will be another potential hazard of space flights. Whereas Byrd experienced extremely low temperatures, the space explorer may be exposed to both extremes of hot and cold.

All these similarities lead us to believe that the astronaut in space for prolonged periods of time may experience many of the stresses Byrd endured. This conclusion leads to a discussion of how individuals concerned with manned space flight may profit from the experience of Byrd.

Implications for Manned Space Flights

From this assessment of Byrd's experience and reactions, as well as those described by Bombard,[2] Ritter,[3] Slocum,[4] and Tiira,[5] certain personologic characteristics and defense mechanisms emerge from persons having successfully endured multistressful life situations. Each of these individuals had a positive faith or hope that he could successfully complete the mission and return to his loved ones. Each was an independent, self-reliant person who was flexible and able to adapt himself to a stressful situation. Even during times of crisis they did not panic and thereby put themselves in a position of being destroyed by the hostile environment. Byrd, as well as others who have been isolated for prolonged periods, developed a feeling of oneness with the universe. This was not in the sense of expecting to be supported in a childlike manner but rather of gaining strength by identifying with the universe and its order.

Along this same theme, these individuals have approached life with a rational approach and made strong use of intellectualization as a primary defense mechanism. There was a strong drive for achievement and a ready acceptance of responsibility. In order to accomplish the mission there was the ability to tolerate and accept pain, disappointment and suffering. Another characteristic of these individuals was that they were "doers" rather than observers. Although some capacity for introspection existed, this seemed to be more of an intellectual exploring of self rather than an emotional understanding of one's inner life. Certainly, at times, Byrd experienced deep emotions but over-all his primary emphasis was on controlled thinking with avoidance, denial, repression and suppression of feelings being secondary defense mechanisms. Byrd and others have had the capacity to be hyperalert to ever present danger, yet have not become anxious or paranoid about the existent dangers. In order to preserve internal integrity, loneliness was admitted but not dwelled upon. Only a limited amount of fantasy material was allowed for fear one might lose proper respect for the harsh reality surrounding him.

So far in this report the emphasis has been placed upon the single individual and his psychological reactions to extended periods of stress. In the near future, however, there will be prolonged space missions with two or three crew members and this necessitates an understanding of small groups. There will be an increased need to select individuals who can communicate easily with others. Living together with several others under confined conditions can be stressful. Under these conditions in which individuals are isolated, there will be an increased tendency for interpersonal conflicts to develop. Differences in beliefs and value systems will become apparent. If the team is to function well as a unit, the crew members must have the ability to work out acceptable solutions. There must develop sufficient mutual understanding and respect so that conflicts can be solved. Otherwise, interpersonal barriers will develop and increased feelings of isolation and distrust will result.

It is hoped that those individuals chosen to participate in prolonged space flights will possess the attributes outlined in this paper. It is believed that these assets, combined with the other desirable characteristics of physiological stability, experience and training, will greatly enhance successful accomplishment of the mission and a safe return voyage.

References are available from the author on request.

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Evaluation of Low Dose Oral Contraceptive

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Orally effective progestational agents were discovered in the middle 1950s and Rock's[1] suggestion of their possible role as antifertility agents has resulted in the availability of two totally effective oral contraceptives. In the present study, one of these compounds, norethindrone, was given at the dose of 2 mg. per day in combination with 0.1 mg. mestranol, although the effective dose has been set at 10 mg. per day. At this reduced dosage the drug was evaluated as an oral contraceptive agent, as well as for its effectiveness in the treatment of a variety of functional disorders of the female genital system. The clinical use of progestational agents in the treatment of such disorders was accepted in principle as early as 1931 when these compounds were purified. Lauritzen[2] summarized the difficulty of this kind of therapy as follows: "The problems of therapy with progesterone are (1) to achieve a constant, long-lasting hormone level in spite of the short half life and rapid inactivation, destruction and excretion of this steroid, and (2) to introduce into the organism the high dosage known to be necessary. Since for technical reasons it has not been possible to solve these problems for natural progesterone, hormone-like steroids have been developed which are in structure similar to progesterone and which imitate some of the actions of this hormone."

Norethindrone is such a hormone-like, compound and fulfills the structural and physiological criteria established by Lauritzen. The results of this study to evaluate its activity at reduced dosage are described here.

The Study

A total of 171 patients was treated with norethindrone 2 mg. with mestranol 0.1 mg. daily from the fifth to the twenty-fifth day of each cycle. This treatment group represented a fertile sampling ranging in age from 16 to 47 years (average 26.8 years). The frequency of pregnancy in these patients, prior to treatment, ranged from none to nine. The total number of pregnancies was 404 or an average of 2.3 per patient.

Included in the sample were 62 patients to whom norethindrone was given for the treatment of various menstrual disorders. Some of these had known pelvic pathologic conditions.

All patients under treatment were seen at intervals of one to three months. At these interviews each patient was questioned regarding consistency of use of the medication, time, quantity and duration of and occurrence of any unusual symptoms. At no time were leading questions asked, but all symptoms reported by the patients were recorded. At each visit, patients were weighed and, when indicated, physical examinations were made .

The study encompassed a total of 775 cycles ranging from one to 15 in any one individual.

Results — Contraceptive

In no case did a patient become pregnant while taking the drug. No other form of conception control was used and the frequency of intercourse in this normally fertile sampling was not different from the pretreatment rate.

Results — Therapeutic

This group of 62 patients had abnormalities of menstrual function sufficient to require treatment. Among them were dysmenorrhea, metrorrhagia, menorrhagia, and amenorrhea. The results in each of these groups were as follows:

Dysmenorrhea was eliminated in 20 of the 28 patients suffering from this syndrome, or 71.5 per cent. It was reduced in six or 21.4 per cent and no change was noted in two or 7.1 per cent. This good result was anticipated since the medication produced anovulation and it is a widely accepted dictum[3] that anovulatory cycles are painless. It follows, therefore, that failure to relieve dysmenorrhea with this type of therapy suggests the possibility of undiscovered pathologic change.

Metrorrhagia was the presenting symptom in 11 patients treated for a total of 49 cycles or an average of 4.5 cycles. Results were considered excellent with resumption of regular cycles and normal amount of flow in seven of the 11 or 63.6 per cent. Improvement was noted in three or

27.2 per cent and one patient has not yet been under treatment sufficiently long for evaluation.

Menorrhagia was treated in 17 patients for 67 cycles or an average of 3.9 cycles per patient. Breakthrough bleeding occurred in 35.2 per cent of these patients and 5.9 per cent of the cycles. Menorrhagia was completely controlled in nine of the 17 patients or 52.9 per cent and improvement was noted in four or 23.5 per cent. There was no improvement in the remaining four and two of these required subsequent hysterectomy because of pelvic pathologic conditions.

Amenorrhea was the symptom treated in six patients ranging in age from 20 to 32 years.[1] The average number of pregnancies for the group had been 1.7 with a range from none to four before treatment. The total number of cycles in which the drug was given was 30 or an average of 5.0 per patient. Before medication the average cycle length was 48.8 days ranging irregularly in individual patients up to 180 days. For five of the six patients regular cycling was produced with an average cycle of 27.2 days after initiation of treatment. One patient failed to respond and had only two episodes of withdrawal bleeding in five months of treatment.

Side Effects

Side effects were minimal and transitory. Breakthrough bleeding was experienced by 32 patients in 37 cycles which represents 18.7 per cent of the patients in 4.7 per cent of the cycles. Spotting occurred in 13 patients (7.6 per cent) in 19 cycles (4.7 per cent). Breakthrough bleeding or spotting was not sufficient to cause discontinuance of medication. Nausea without emesis and other gastrointestinal symptoms occurred in 12 patients (7.0 per cent) in 12 cycles (1.5 per cent) and was a cause for discontinuance in four patients showed no change in weight and are not problem. Table 1 summarizes the changes in weight where such changes occurred. Twenty-four patients showed no change in weight and are not included in the table, and in nine, no record of weight was made.

Table 1

Weight Range	No. Gained	Per Cent	No. Lost	Per Cent
0-5	74	43.2	24	14.0
6-10	18	10.5	5	2.9
11-15	9	5.2	2	1.1
over 15	5	2.9	1	0.5

Other symptoms were noted in 19 patients with a total frequency of 20 symptoms in 2.6 per cent of the cycles. These symptoms included slight breast tenderness in four patients, lactation in one, slight abdominal cramping in four, groin pain with radiation to the leg in one. Other effects noted in one cycle in individual patients were loss of libido, vertigo, fatigue, sleepiness, chills and vomiting, edema, premenstrual night sweats and hearing loss.

Among the patients participating in the study were a number who withdrew or were dropped for a variety of reasons. Among these were 20 who for their own convenience were transferred to Ortho-Novum 10 mg. which could be obtained by prescription. The reasons for discontinuation for 42 others are listed in table 2.

Table 2

Achieved adequate therapeutic results	8
No further need	2
Lost to follow-up or moved out of area	21
Adverse publicity	3
Method too troublesome	2
Side reactions	6

Six discontinued taking the norethindrone to plan pregnancy. Two of these became pregnant in the first unprotected cycle, and the other four are being followed.

Discussion and Summary

Norethindrone 2 mg. with mestranol 0.1 mg. used as directed was found to be a totally effective oral contraceptive in a group of fertile otherwise unprotected females. It is the method of conception control most acceptable to the patient because of its assured effectiveness in the absence of mechanical or chemical devices. Infertility produced by this compound has been shown to be readily reversible. Side reactions were generally minimal and transient, and tended to occur in the early cycles of use. They were rarely sufficient to cause discontinuance in adequately motivated patients. This drug appeared to be valuable in treatment of functional uterine bleeding, dysmenorrhea, and amenorrhea when these conditions were not the result of organic disease. Failure of control of functional bleeding requires a re-evaluation of the patient for exclusion of previously undisclosed organic disease.

References

1. Rock, J.; Garcia, C. R., and Pincus, G.: Synthetic Progestins in the Normal Human Menstrual Cycle, Recent Progr. Hormone Res. 13:323-339, 1957.
2. Lauritzen, C.: Clinical Experience with New Progestins, J. Endocrinol. 24:26, 1962.
3. Garrett, W. M.: A Physiological Background to Spasmodic Dysmenorrhea, M. J. Australia. 47(2): 458-460 (Sept. 17) 1960.
4. Zondek, B., and Rozin S.: Production of Uterine Haemorrhage in the Normal Cycle and in Amenorrhoea Through Progesterone, J. Obst. & Gynaec. Brit. Emp. 45:918-931 (Dec.) 1938.

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Hypokalemic Nephropathy

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The fact that potassium depletion may cause marked weakness, disturbances of gastrointestinal motility, electrocardiographic changes and death is well known. In 1953, Schwartz[1] reported a reversible renal lesion resulting from chronic potassium depletion. The most constant finding was vasopressin - resistant hyposthenuria which responded to replacement of potassium deficits. The case reported illustrates the typical findings of potassium nephropathy, the delayed response to replacement therapy, and the rapidity with which this syndrome can occur.

Report of Case

A 52 year old, white woman was first admitted to the Orange Memorial Hospital, Orlando, on Jan. 6, 1962, with the chief complaints of weakness, abdominal swelling, increased thirst and severe constipation. On Dec. 7, 1961, she had been in an automobile accident as a result of which she was unconscious for several hours, suffered a laceration of the chin and multiple rib fractures, and was admitted to another hospital. While she was hospitalized there, pneumonia developed and she was treated with antibiotics and intravenous fluids. She was unable to take fluids by mouth until approximately December 20, at which time she was discharged from the hospital. During the next three days she noted increased thirst, generalized weakness and nausea with occasional vomiting and on December 26 was readmitted to the hospital, at which time the serum potassium was 2.5 mEq. per liter. Over the next four days she was given approximately 320 mEq. of potassium chloride intravenously in 5 per cent glucose in distilled water and 80 mEq. of potassium gluconate by mouth. The serum potassium level, however, remained constant throughout the four days and the symptoms were unchanged. She was then transferred to Orange Memorial Hospital in Orlando.

At this time she had marked weakness and upon sitting upright would become faint, dizzy and nauseated. She complained of abdominal distention and severe constipation. Although she was unable to take solid food, she was continuously thirsty and drank large quantities of water and juices. There had been mild dysuria, polyuria, and nocturia since removal of a Foley catheter one week prior to admission. There was no history of steroid therapy.

Physical examination revealed a pale, dehydrated woman who appeared chronically ill. The blood pressure was 120/80 mm. Hg recumbent and dropped to 100/70 mm. Hg on sitting quickly. Heart sounds were normal. The abdomen was quiet and distended with generalized tenderness and no palpable masses. The rectal examination revealed feces but no impaction. The remainder of the physical examination including pelvic and neurological examination was within normal limits. The reflexes were reduced but present and equal bilaterally.

The hemoglobin was 12 Gm. per hundred milliliters, hematocrit reading 35 volumes per cent, and white blood cell count 10,200 with a normal differential. The sodium was 142 mEq., chlorides 118 mEq., carbon dioxide combining power 21.3 mEq. and potassium 2.4 mEq. per liter. The blood sugar was 115 mg. and the blood urea nitrogen 24 mg. per hundred milliliters. The urinalysis showed 15 to 20 white cells per high power field with a pH of 5.5. The specific gravity of the urine was 1.005 and was unchanged after administration of 700 ml. of 3 per cent saline and 0.3 ml. vasopressin (Pitressin) intravenously (table 1). The blood urea nitrogen on January 8 was 17 mg. per hundred milliliters. The urine culture showed Proteus mirabilis. A phenolsulfonphthalein test showed 11.5 per cent dye excretion in the first half hour and a total of 18 per cent excretion in two hours. The calcium was 10 mg. and phosphorus 3.1 mg. per hundred milliliters and alkaline phosphatase 5.0 Bessie Lowry units. A 24 hour urine consisted of 4 liters with 15.6 mg. of 17-ketosteroids and 12.2 mg. of 17 hydroxy corticoids. Potassium excretion in 24 hours was 94 mEq. per liter, but at that time the intake was over 250 mEq. daily. Two days after admission the blood potassium was 2.2 mEq. per liter and rose to 3.5 on the fourth hospital day and thereafter remained normal. Creatinine clearance was 42 ml./min. on the fourth hospital day. X-rays of the chest and abdomen were within normal limits except for fractures of the right third through the sixth ribs. An intravenous pyelogram showed faint opacification but no other abnormalities. The electrocardiogram on admission showed some of the typical changes of hypokalemia with flat T waves and prominent U waves in all leads. These reverted to normal after potassium replacement.

The patient was given 56 mEq. of potassium chloride intravenously on the first day and 90 mEq. of potassium gluconate by mouth for two days, which was then increased to 120 mEq. for the remainder of this period of hospitalization. The serum potassium remained low for the first four days. During this period she continued to manifest weakness, postural hypotension and anorexia. There was gradual subsidence of these symptoms over the next 10 days. The patient had polydipsia during the hospital stay averaging approximately 4,000 ml. daily intake with approximately the same output. She was discharged on January 17, took nitrofurantoin (Furadantin) 200 mg. daily for one week and 80 mEq. of potassium gluconate daily until February 6 when the potassium dosage was lowered to 40 mEq. daily. It was discontinued two days prior to her readmission on March 17.

At this time she was completely asymptomatic. Physical examination gave normal results. Creatinine clearance was 55 ml./min. A phenolsulfonphthalein test showed 30 per cent excretion in the first 20 minutes with a total two hour excretion of 68.5 per cent. The urine was normal with a specific gravity of 1.015. Urine culture was sterile. Serum electrolytes were normal, including a potassium of 4.7 mEq. per liter; blood urea nitrogen was 16; and an electrocardiogram was normal. The urinary specific gravity rose from 1.008 to 1.015 after 700 ml. of 3 per cent saline was given intravenously and it increased to 1.018 after 1.3 ml. of vasopressin was administered intravenously. After 20 hours of fluid deprivation the urinary specific gravity was 1.020. Following discharge from the hospital the patient has remained well without supplemental potassium.

Discussion

This case demonstrates the typical findings of hypokalemic nephropathy as outlined by Schwartz and Relman:[1,2] slight elevation of blood urea nitrogen; vasopressin-resistant hyposthenuria, re-

duction in creatinine clearance and reduction of phenolsulfonphthalein excretion, associated with a slow reversal of these abnormalities following administration of potassium. Renal biopsies in three of their patients showed hydropic and degenerative changes confined chiefly to the convoluted tubules without significant glomerular vascular disease. Restoration of potassium deficits produced total healing in one patient and marked improvement in another.

Considering the relative frequency with which severe chronic potassium depletion occurs, it might at first seem surprising that the renal dysfunction associated with this condition has not been more widely recognized. It is probable that the clinical manifestations of this syndrome have been overlooked because they are ordinarily neither striking nor particularly specific. Furthermore, potassium depletion often occurs in situations complicated by many other factors capable of producing renal disturbances, so that its special significance might easily go unnoticed. That the nephropathy of potassium depletion actually occurs frequently and in a wide variety of circumstances is suggested by the fact that the distinctive vacuolar lesion found in renal biopsies in patients with this disease has been noted by numerous pathologists in a considerable number of clinical states, particularly in severe diarrheal diseases.

There are many causes of potassium loss which should be considered in patients presenting this syndrome.[3] Diarrheal diseases such as ulcerative colitis, dysentery, steatorrhea, regional enteritis, and chronic use of laxatives or enemas can cause hypokalemia with resultant nephropathy. Renal manifestations may persist after cessation of diarrhea and even after the serum potassium has become normal.

Steroid treatment, Cushing's syndrome and hyperaldosteronism are well known causes of hypokalemia.[4,5] Lack of a history of steroid treatment in our patient, normal blood sugar, and normal 24 hour urinary 17 hydroxy corticoids and 17 ketosteroids ruled out Cushing's syndrome while the absence of hypertension and the clinical and laboratory response to treatment with potassium excluded primary aldosteronism as described by Conn.[4]

Primary renal disease with potassium wasting has been reported in the literature.[6-9] The urine culture of our patient was positive for Proteus mirabilis and initially pyelonephritis was considered as the possible etiology. The clinical response, however, to potassium and the subsequent reversal of the renal functional abnormalities ruled out a chronic renal lesion as the cause of the hypokalemia. The bacilluria was due to the indwelling Foley catheter and the urine culture was sterile after recovery. Had there been any type of endogenous cause of hypokalemia of a chronic nature, the serum potassium would not have been maintained after all potassium therapy was discontinued.

Hypercalcemia with secondary hypercalciuria may cause a syndrome similar to hypokalemic nephropathy with polyuria, low specific gravity, decreased phenolsulfonphthalein excretion, and nitrogen retention. Albuminuria, hypertension and abnormal sediment are usually absent. The diseases which cause this syndrome are hyperparathyroidism, vitamin D poisoning, excessive milk and alkali ingestion, metastatic bone disease, multiple myeloma, sarcoidosis, and prolonged immobilization. Although this syndrome bears a clinical resemblance to hypokalemic nephropathy, and clinical findings associated with the primary diseases plus the hypercalcemia, hypercalciuria, and absence of hypokalemia enable one to differentiate these conditions easily.

In renal tubular acidosis[3] the kidney is unable to secrete hydrogen ion in exchange for sodium. Potassium and calcium are excreted as basic cations resulting in varying degrees of nephrocalcinosis and hypokalemia. Patients with this syndrome have metabolic acidosis with paradoxical alkaline urine. Our patient had an acid urine and responded to potassium without supplemental bicarbonate. The mild metabolic acidosis, unusual in potassium nephropathy, was thought to be due to excessive saline administration prior to admission.

Familial periodic paralysis,[10] a rare familial disease, characterized by attacks of weakness, associated with low serum potassium, is believed to be caused by a sudden shift of potassium from the extracellular to the intracellular space.[11] Our patient had a negative family history, no history of previous attacks, and a slowly progressive response to treatment with potassium, all findings incompatible with this diagnosis.

Diabetes insipidus was initially considered in this patient who gave a history of head injury and unconsciousness followed by marked polydipsia and polyuria. This diagnosis was excluded on the basis of failure to respond to vasopressin,

Table 1.—Changes in Kidney Function Before and After Treatment With Potassium

	First Admission	Second Admission
PSP 30 min.	5	30
PSP 2 hours	18	68.5
Ccr	42 ml.	55 ml.
Max. spec. grav. with 12 hour fast	1.005	1.020
BUN	24	16
Serum K	2.4	4.7
Serum Cr	1.3	1.4
Max. conc. 3% saline	1.005	1.015
Max. conc. 0.3 ml. vasopressin	1.005	1.018

low serum potassium, and typical changes in kidney function which responded to potassium treatment as well as the gradual subsidence of the polyuria and polydipsia.

Thiazide diuretics, probably the most frequent cause of hypokalemia today, were not used in this patient's care.

An important aspect of hypokalemic nephropathy brought out in this case is the slow response to therapy. Despite large amounts of potassium by mouth the serum level did not rise appreciably for five days. Most of the symptoms subsided by this time, but the polyuria and polydipsia persisted for three weeks.

Two factors may have influenced this patient's course prior to admission: (1) Enhancement of the loss of potassium by the marked polyuria which in turn was caused by the potassium depletion. (2) Most of the potassium administered prior to admission was given with glucose intravenously and this has been shown by Grob[12] to lower the serum concentration of potassium. He has also shown that the weakness associated with hypokalemia is dependent on the ratio of intracellular to extracellular potassium and that if intracellular potassium is increased with the glucose infusion, the patient may actually feel worse and have increased symptoms. When potassium in glucose solution was given at a rate of less than 40 mEq. per hour, Kunin, Borgs, Surawicz and Sims[13] found decreased serum potassium and increased electrocardiographic changes of hypokalemia. Most reports of hypokalemic nephropathy show complete reversion to normal over a period of three to eight months, although Schwartz and Relman[1,2] reported one case out of five in which the patient continued to have slight impairment of kidney function. This patient had concomitant pyelonephritis and his functional abnormalities were more consistent with this diagnosis than with hypokalemic nephropathy.

Summary

A case is presented in which the characteristic symptoms and renal abnormalities of hypokalemic nephropathy occurred after a short period of potassium deprivation and were reversed slowly by vigorous oral potassium therapy. The possibility of hypokalemic nephropathy should be constantly borne in mind since it may occur much more frequently than has heretofore been suspected in the numerous clinical conditions that may result in potassium depletion. In treating this condition, massive oral potassium therapy over a long period of time is necessary. Intravenous potassium therapy, unless given at a dangerously high rate, may transiently increase the symptoms. Previous reports have intimated that this renal lesion occurs only after prolonged potassium depletion, but this patient noted symptoms only two weeks after an automobile accident, demonstrating that this lesion may occur in acute as well as in chronic potassium deficiency.

References are available from the authors upon request.

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President's Page

Major Medical

"What goes in must come out" may apply to many things but "What comes out must have gone in" is more applicable to insurance. Since profit is the prime motive for existence of most of our American enterprise, including insurance, "What comes out" must allow for expenses of operation as well as profit if the enterprise is to survive.

Only government has been able to operate at a deficit over a period of time and that is because others make profits, pay taxes and underwrite loans. Even government difficulties mount as deficits increase. Even so-called nonprofit organizations must be able to set aside a certain "profit" as "addition to reserves" if they are to be of sound structure. Our land cannot operate as we know it on government and nonprofit alone. Someone must pay.

Although sometimes we may not approve the percentage of profit made by some companies, we physicians should not speak disparagingly of profit itself. In fact, those of us who fail to maintain an income greater than our outgo do not remain long in the private practice of medicine.

This introduction brings us to the simple facts of life regarding health insurance, and particularly major medical insurance. Patients and doctors seem to have the inflated idea that it is an easy matter to insure people against the costs of illness. When it is a predictable item, it can be actuarily calculated with reasonable certainty, but we are the first to know that mid twentieth century is anything but predictable. Many treatments used today were not known a few years ago.

I believe that insurance companies, led by Blue Cross-Blue Shield, sincerely tried to underwrite more or less complete costs of major illness. They did so with trepidation because they were frightened of possible costs. This proved to be an impossible task because a small percentage of hospitals and doctors cheated and charged too much for services rendered. Deductibles were included in some physicians' bills. Doctors of a few limited specialties indicated inflated egos in billing and negotiating. Our relative value schedules still reflect their selfish pursuits. To make major medical more realistic at approximately the same premium, a statement was inserted in the contract to the effect that reimbursement would be made for the usual and customary charges in providing reasonable and necessary services in the community. Naturally, they would have preferred the great averaging of a fee schedule, but we opposed it and the public wanted more assurance of complete coverage. They listened.

They underwrote something which was bought in unprecedented fashion by the public, at our request. Since voluntary insurance is our primary protection against government control of our profession, it is up to us to see that insurance has some protection against unreasonable and noncustomary charges. The county level is the logical place for this service and it behooves us to provide it in a cooperative manner. The insurance companies can determine the payment themselves and some do, but usually if there is a question, an appeal is made by the doctor, patient or insurance carrier. The appeal is considered at county level, or if the county ignores its obligation, it is made at the state level through Insurance Review or Mediation Committees set up for this purpose.

Some physicians consider it an insult to have a physicians fee or hospital charges questioned by an insurance company. Lest we forget, we who practice medicine have seen how easy it is for the patient to spend someone else's money. First day, first dollar payment stimulates desire for hospitalization and usually one can tell from the desire of the patient to leave the hospital who is paying the bill.

If the insurance company is foolish enough to pay exhorbitant, unreasonable bills, it will soon be brought to a screeching halt by the failure to produce the magic word "profit." The time of reckoning comes and if such a policy is not corrected, one of two alternatives exists. The rates are raised or benefits and commissions reduced to compensate for the increased outgo, or the company discontinues major medical insurance (as has American Casualty Company in 1964). Soon the patient is unwilling or unable to pay the high premium and another call is made for government medicine.

If we doctors will treat patients fairly, giving services as needed for fees the *individual* could afford to pay WITHOUT regard for insurance (a usual and customary fee), hospitalizing patients as if *they* were paying the bills (reasonable and necessary services), being honest with deductibles, and disciplining those few colleagues who persistently refuse to do likewise, we should have few difficulties with insurance.

Read Lehman, David J., Jr., JFMA, April 1964, volume 51, number 4, pages 241-242.

Sam Day

Magnanimity

Human folly sadly reflects man's progress from the cave to modern technological wizardry. Its history has been written in blood and tears. Man's ingenuity and skills continue to produce weapons of frightful destruction. People everywhere are hungry, malnourished, poorly clothed, diseased and lonely. The waste of human potential and wealth seems endless. Propaganda machines lie about freedoms and equitable distribution of food, materials and opportunity.

Apathy and indifference are commonplace, in spite of the figures that statisticians claim make for a better world. Many people are made to feel subhuman because of the color of the skin or economic circumstance. Might still seems to make right. We want to make the world free, in our own image.

Thinkers of deep truths are heroic men, and rare in our society. Men of action are preferred to men of reflection. People resent thinkers, and suspect them of dangerous activities. Heroic men with their universal pursuits of a global humanity have Magnanimity, that loftiness of spirit to bear trouble calmly, to disdain meanness and revenge, and to make sacrifices for worthy ends. Hollywood fatuity portrays our age of chivalry and chicanery. The business world is full of conniving intrigue that would make a Torquemada wince. Competitive acquisitiveness is harsh and bitter. Crime is rampant while the laws that punish criminals add to the confusion and hatred. Magnanimity is a precious pearl needed to make men SEE.

Magnanimity is the dedication for doing good, in a world dark with power politics, nationalism, manipulation and opportunism. Magnanimity is the effervescent desire to eliminate the servility in human affairs that tends to cheapen and degrade people. Magnanimity is the recognition that the Golden Rule of doing unto others what you wish for yourself will produce freedom and equality without fear or pressure.

Magnanimity implies the inherent character to pursue and destroy sham, ignorance and misfortune, as vicious diseases affecting millions of persons in many lands. Surely man is worthy of being better understood and more nobly inspired to fulfill his greatest potentialities. In his devotion to the Ideal, man can transcend himself and become more godlike in his heroic endeavors. He needs the time and perseverance to study himself and his relationship with the world about him. His taboos are still fantastic and outrageous. The myth of his own invincibility as the center of interest of the universe is a majestic phantasy. He bursts with pomp and ceremony, proclaiming his sensual lusts for power and glory. He yearns for fame and fortune, pretending to be so wise and so secure; yet he lives in a fool's paradise of bluff and corruption. He believes himself master of nature on earth and on the seas, and yearns to show the world that he is a superman in mind and body. The officious man wallowing in self aggrandizement and torpor is a sad pygmy, too scared to look at his real image in the mirror.

The New Spirit of man demands a man of Magnanimity, a new man the world wishes to herald, an heroic giant who will lead people to new values and new heights of human accomplishment for the betterment of mankind, a new dawning of the Messianic Age, when Simplicity and Goodness will demonstrate that all men are really brothers. The burdened human soul cries for help in finding liberty and freedom enlarged and enhanced with deliberation, beneficence and heroism. The new heroism of the man of the future is nurtured with Magnanimity.

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MIAMI BEACH

Whose Blues?

The average Participating Physician in Blue Shield who has entered practice in the past 15 or 20 years or less is often unaware of what an ally Blue Shield-Blue Cross has been to him and his medical brethren. He may be unaware of the reasons for which it was started, unaware of the struggles that it had at its incipiency, unaware of the tremendous growth of the program over the years, unaware of the great influence it has had in preventing public demand for greater government intervention in the health field. Some physicians have begun practice in an era when the Blue Shield and Blue Cross Plans were as much a part of medical practice as were community blood banks. But how they began, why they were needed, how they have successfully thwarted the exponents of government medicine by answering economic needs through Service Benefits are all lost sight of in the simple fact that here and now they are like Everest. Sort of like who cares how the community blood bank came to be and why as long as blood is available to use!

When physicians, unaware of the past, criticize Blue Shield, they do not realize that Blue Shield, over the years, has admirably served as medicine's bargaining table; that in many instances offers by commercial insurance companies have followed the schedules arrived at by Blue Shield, which schedules in turn were worked over and worked upon and worked out by members of the medical profession as Participating Physicians in such Plans. The criticism that Blue Shield is trying to dictate what the doctor's fee will be is utterly fallacious. Blue Shield acts as a sounding board for public opinion regarding physicians' fees and is cognizant of what the public is demanding in the way of medical coverage. By making these public demands known to the physicians and by working with boards of physicians, Blue Shield is constantly improving fee schedules in an effort to keep both physicians and the public happy in an ever expanding and complicated economy. It is not that Blue Shield is trying to fix fees but rather that the public is demanding such fixed fees, total medical coverage through insurance and other improvements in the manner in which health care costs can be met.

If the public wants and demands total prepayment of health care costs, it is of little avail for the medical profession to rail out against such an economic philosophy or to berate Blue Shield for attempting to come to grips with this problem. It does so by suggesting to the physicians compromise plans which, while answering in large measure the public demand, still preserve in the largest measure possible the free enterprise system of medicine. It has been said when the public truly wants socialized medicine, it will get it. If the public now is approaching a point at which it wants a greater part or all of medical care costs prepaid through insurance, it is somehow going to receive it. It behooves the medical profession to do all it can to achieve this prepayment through insurance of the *voluntary* kind. The medical profession can continue to meet public demands through the intermediary of Blue Shield, its ally, or it can, by withdrawing its support from Blue Shield, force some government agency to make the compromise that must inevitably be made whenever a strong public demand is heard.

In the makeup of the Florida Medical Association, there is a special fee schedule committee that is operating and is on guard to see that the physician gets his fair share of the medical expense dollar. The Committee of 17 (the Advisory Committee on Blue Shield) is a function of the Florida Medical Association which stands ready to represent your interests from a monetary and philosophical standpoint with Blue Shield of Florida and, finally, physicians are in the majority on the Blue Shield Board of Directors. All of these physicians have the same aims, the same needs, and the same social and economic philosophies held by the vast majority of physicians in the state of Florida. Indeed, these doctors are your fellow practitioners. Perhaps at times these committees arrive at recommendations which, on the surface, would seem to be answers or compromises that should be rejected without further ado. It should be pointed out that sometimes the recommendations ultimately made are just as summarily dismissed initially by committee members as, at first glance, they are by you. It is, however, sometimes only after hours of deliberation that a proposal, which at first appeared completely unpalatable, tastes pretty good after it's chewed a while and a little seasoning added to it.

In conclusion, therefore, I would like to state to my fellow physicians that Blue Shield is truly your economic arm. Make it strong by

using it wisely and improve its strength by the proper exercise of good judgment regarding the proposals it makes to protect you in continuing your practice in the free enterprise system of medicine. Your fellow physicians, appointed to committees by the Florida Medical Association, by protecting your interests are truly protecting their own since they are but one of you. When you have a complaint against Blue Shield, take a bit of time to set your thoughts on paper, deliberate the matter and if you can find a better answer that is feasible and workable, submit it to your Blue Shield representative for consideration. Good and helpful ideas, well conceived and considered, are not only always welcome but always needed. If your "Shield" is a bit bent at times, don't throw it away, repair it. Remember, it has served you well in many battles with Murray-Wagner-Dingell and King-Anderson. And remember, through your medical colleagues representing you, *YOU* are Blue Shield.

Raymond J. Fitzpatrick, M.D., Chairman,
Advisory Committee on Blue Shield

Comprehensive Medical Care and the Specialty of Physical Medicine and Rehabilitation

Physical Medicine and Rehabilitation is a broad specialty which developed in response to special human needs. Just as convalescent soldiers were returned to duty earlier in World War II, so are civilians today being returned to useful, gainful lives in society as a result of proper specialized supervision. The joint designation "Physical Medicine and Rehabilitation" includes the diagnosis, management and treatment of disease, defect or injury by the use of physical means and the restoration of the patient to the fullest possible physical, mental, social and economic usefulness. The specialty properly integrated with all available medical and other professional services can reduce to a minimum the handicaps associated with disability. To this specialty group must be assigned the responsibilities for the management of the very difficult cases, for the organization of special rehabilitation services and for providing consultation to other physicians as necessary.

Physiatrists, as the specialists in physicial medicine and rehabilitation are called, are specially trained to direct the rehabilitation programs of those patients requiring the combined use of those specialized disciplines, techniques and facilities that provide for the physical restoration, psychological adjustment and personal and vocational counseling, so as to foster the return to self care, self sufficiency, or productive employment. These are the patients usually suffering from the effects of chronic disorders of the neuromuscular and musculoskeletal systems, conditions such as cerebrovascular accidents, the arthritides, multiple sclerosis, cerebral palsy, paraplegia and quadriplegia, chronic back pain syndrome, Parkinson's disease, amputations and others. Because of their complex nature, these conditions require the team approach by the physician, the medicosocial worker, the physical therapist, the occupational therapist, the speech therapist, the psychologist and the vocational counselor.

In this era of discovery and continued exploitation of scientific facts in medicine, the physician-scholar and medical educator alike have tended to lose sight of the patient as an individual in his environment. With this tendency to think of patients as cases, the physician-patient relationships have become attenuated. Among those physicians who shared in the redevelopment of the concept of the care for the individual as a whole, the specialists in physical medicine and rehabilitation have a leading part.

Evaluative methods such as muscle testing, work load studies, electrodiagnosis and electromyography have added considerable weight to the opinions of the specialist in physical medicine and rehabilitation. He has become a source of dependable knowledge to his confreres as to how extensive a patient's involvement may be, the prognosis and how much function might remain.

The physiatrist has done much to focus attention on the values of mobilization and exercise as both preventive and curative measures. Today, this specialist is the chief exponent of the balanced prescription for physical aspects of treatment, these balanced prescriptions being based on a truly searching study of the patient as a person. This is an art which takes into account medical, emotional, social and vocational factors extended through a continuum with provisions for changes

as they become necessary. The specialist in physical medicine and rehabilitation is a thoroughgoing clinician specially schooled in physics, physiology and anatomy. He has an extensive knowledge of neurology, rheumatology and diseases of muscles and connective tissues. He is required to know pain phenomena thoroughly and be possessed of superior social consciousness so as to further the purpose of all medicine in helping people toward a goal of medicosocial homeostasis.

The physical methods of diagnosis evaluation and treatment as used by the specialist in physical medicine and rehabilitation are often the most objective methods available and more specific than any other in many clinical conditions. The thought that physical medicine is ancillary, adjunctive, or dispensable has been replaced by the conviction that physical procedures such as therapeutic exercise, thermotherapy, hydrotherapy, electrotherapy and electrodiagnosis are essential elements in any plan for treatment of a patient, omission of which may amount to neglect.

PEDRO ARROYO JR., M.D.
MIAMI

Association News

SCHEDULE OF ACTIVITIES
FLORIDA MEDICAL ASSOCIATION ANNUAL MEETING
Hotel Americana, Bal Harbour, April 22-25, 1965

Wednesday, April 21

All Day	Set Up Exhibits	Grand Ballroom
2:00 p.m.	Registration Desk Opens	Grand Ballroom Foyer
2:00-4:30 p.m.	Delegates' Registration	Medallion

Thursday, April 22

All Day	Registration and Exhibits	Grand Ballroom
All Day	Woman's Auxiliary Hospitality Room	Rooms 202-203
8:00-9:30 a.m.	Delegates' Registration	Medallion
9:30 a.m.	First House of Delegates Session	Grand Ballroom
11:00 a.m.	Blue Shield Annual Meeting	Grand Ballroom
1:00 p.m.	Woman's Auxiliary, Registration and Board Meeting	Westward
2:00 p.m.	Television Presentation	Grand Ballroom
3:30 p.m.	FMA Scientific Session	Grand Ballroom
4:00 p.m.	Woman's Auxiliary Interview Hour	Mrs. Fitzgerald's Suite
8:00 p.m.	Florida Academy of General Practice, Board of Directors	Rooms 204-205
8:00 p.m.	Florida Association of General Surgeons, Scientific Film Program	Pan American
8:00 p.m.	Florida Society of Internal Medicine, Council	Room 201

Friday, April 23

All Day	Registration and Exhibits	Grand Ballroom
All Day	Woman's Auxiliary Hospitality Room	Rooms 202-203
8:00 a.m.	Board of Past Presidents, Breakfast	Gaucho
8:00 a.m.	Woman's Auxiliary Registration	Floridian
9:00 a.m.	Television Presentation	Grand Ballroom
9:00 a.m.	Woman's Auxiliary House of Delegates	Floridian
9:00 a.m.	Reference Committee No. 4	Westward
9:30 a.m.	Reference Committee No. 3	Barbados
10:00 a.m.	Reference Committee No. 2	Bermuda
10:30 a.m.	Reference Committee No. 1	Bal Masque
11:00 a.m.	General Session (President's Guest Speaker)	Grand Ballroom
12:30 p.m.	Woman's Auxiliary Annual Luncheon	Medallion

2:00 p.m.	Television Presentation	Grand Ballroom
3:00 p.m.	Woman's Auxiliary Membership Meeting	Mrs. Fitzgerald's Suite
3:30 p.m.	FMA Scientific Session	Grand Ballroom
6:30 p.m.	President's Reception	Poolside (Alt.-Eastward & Westward)
7:30 p.m.	Alumni and Fraternity Groups	

Saturday, April 24

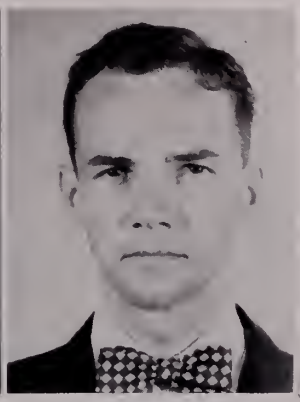
All Day	Registration and Exhibits	Grand Ballroom
All Day	Woman's Auxiliary Hospitality Room	Rooms 202-203
8:00 a.m.	Florida Obstetric & Gynecologic Society, Breakfast, Executive Committee	Gaucho
8:00 a.m.	Florida Health Officers' Society, Business	Room 201
9:00 a.m.	Florida Society of Dermatology, Business	Pan American
9:00 a.m.	Florida Society of Internal Medicine, Business and Scientific	Bal Masque
9:00 a.m.	Florida Neurosurgical Society, Business and Scientific	Yucatan Aztec
9:00 a.m.	Florida Obstetric & Gynecologic Society, Business and Scientific	Gaucho
9:00 a.m.	Florida Orthopedic Society, Business and Scientific	Medallion
9:00 a.m.	Florida Society of Pathologists, Business	Heather, Balmoral Hotel
9:00 a.m.	Florida Society of Ophthalmology and Otolaryngology, Scientific	Caribbean Suite
9:00 a.m.	Florida Psychiatric Society, Council	Embassy, Balmoral Hotel
9:00 a.m.	Florida Radiological Society, Scientific	Floridian
9:00 a.m.	American College of Surgeons, Fla. Chapter, Business and Scientific	Grand Ballroom
9:00 a.m.	Woman's Auxiliary Board Meeting	Eastward
9:30 a.m.	Florida Society of Anesthesiologists, Board of Directors	Argyle, Balmoral Hotel
10:00 a.m.	Florida Allergy Society, Business	Rooms 204-205
10:00 a.m.	Florida Proctologic Society, Scientific	Room 206
12:00 noon	Florida Society of Dermatology, Luncheon	Pan American
12:00 noon	Florida State Surgical Division, International College of Surgeons, Luncheon	Room 201
12:00 noon	Florida Society of Physical Medicine & Rehabilitation, Luncheon	Conference Room 3
12:00 noon	Florida Urological Society, Luncheon	Westward
12:15 p.m.	Florida Chapter. American College of Chest Physicians	Gaucho
1:00 p.m.	Florida Society of Internal Medicine, Luncheon	Bal Masque
1:00 p.m.	Florida Society of Plastic & Reconstructive Surgery, Business & Scientific	Room 207
1:00 p.m.	Florida Society of Ophthalmology and Otolaryngology, Luncheon	Caribbean Suite
1:00 p.m.	Florida Allergy Society, Scientific	Rooms 204-205
2:00 p.m.	Florida Psychiatric Society, Scientific	Embassy, Balmoral Hotel
2:00 p.m.	Florida Society of Dermatology, Scientific	Pan American
2:00 p.m.	Florida Society of Pathologists, Scientific	Heather, Balmoral Hotel
2:00 p.m.	Florida Association of General Surgeons, Business and Scientific	Grand Ballroom
2:00 p.m.	Florida Society of Ophthalmology and Otolaryngology, Business	Caribbean Suite
2:00 p.m.	Florida Proctologic Society, Business	Room 206
2:30 p.m.	Florida Society of Anesthesiologists, Business	Argyle, Balmoral Hotel
3:00 p.m.	Florida Academy of General Practice, Business	Aztec
4:00 p.m.	Florida Radiological Society, Business	Floridian
6:00 p.m.	Florida Orthopedic Society, Cocktails	Medallion
6:30 p.m.	Florida Society of Dermatology, Cocktails and Dinner	Pan American
6:30 p.m.	Florida Neurosurgical Society, Cocktails	Yucatan Aztec
6:30 p.m.	Florida Society of Pathologists, Cocktails	The Club, Balmoral Hotel
6:30 p.m.	Florida Society of Ophthalmology and Otolaryngology, Cocktails and Dinner	Caribbean Suite
6:30 p.m.	Florida Radiological Society, Cocktails	Floridian
6:30 p.m.	American College of Surgeons, Florida Chapter, Cocktails	Westward
6:30 p.m.	Florida Urological Society, Cocktails	Eastward

Sunday, April 25

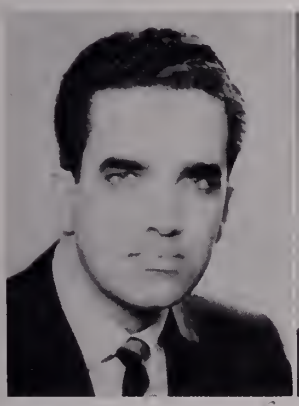
Morning	Registration	Medallion
8:00-9:30 a.m.	Delegates' Registration	Medallion
9:30 a.m.	Second House of Delegates Session	Bal Masque
1:00 p.m.	Post-Convention Board of Governors Meeting	Yucatan Aztec
12:00 noon	Florida Pediatric Society, Luncheon	Pan American

SPEAKERS FOR SCIENTIFIC PROGRAM

Dr. Jude



Dr. Gilmore



Dr. Viamonte

Dr. Lary

Dr. Wheat

Dr. Dean

TELEVISION PRESENTATION — CARDIOLOGY

Moderator: James R. Jude, M.D., Professor of Surgery, University of Miami School of Medicine. Participants: Carlos P. Lombardo, M.D., Assistant Professor of Surgery; Hugh R. Gilmore III, M.D., Associate Professor of Cardiology; Manuel Viamonte, M.D., Associate Professor of Radiology, University of Miami School of Medicine, and Banning G. Lary, M.D., Miami; Myron W. Wheat Jr., M.D., Chairman, Section of Thoracic and Cardiovascular Surgery, Department of Surgery, University of Florida College of Medicine, and William J. Dean, M.D., St. Petersburg

Dr. Ingram

Dr. Rubio

Dr. Batchelder

Dr. Boucek

SECTION ON FIBRINOLYSIN

James M. Ingram, M.D., Tampa, "Fibrinolysin Alterations in Obstetrics;" Fernando A. Rubio Jr., M.D., St. Petersburg, "Etiology and Management of Fibrinolytic States;" Theodore L. Batchelder, M.D., Jacksonville, "Fibrinolysin as Related to Cardiovascular Surgery," and Robert J. Boucek, M.D., Miami, moderator of panel following presentations.

Dr. Sarmiento

TELEVISION PRESENTATION — CURRENT CONCEPTS OF REHABILITATION

Moderator: Augusto Sarmiento, M.D., Associate Professor of Orthopedic Surgery, University of Miami School of Medicine. Participants: Jean Jones Perdue, M.D., Irving P. Eney, M.D., Joseph J. Kalbac, M.D., and Creighton L. Wilson, M.D., Miami.

Dr. Perdue

Dr. Eney

Dr. Kalbac

Dr. Wilson

Dr. Harrington

TELEVISION PRESENTATION: RECENT ADVANCES IN CANCER THERAPY

Moderator: William J. Harrington, M.D., Chairman, Department of Medicine, University of Miami School of Medicine, Miami. Participants: Adel Yunis, M.D., Assistant Professor of Medicine; Donald Harkness, M.D., Assistant Professor of Medicine, University of Miami School of Medicine; Thomas F. Newcomb, M.D., Professor of Medicine, University of Florida College of Medicine, and Howard E. Lessner, M.D., Assistant Professor of Medicine, University of Miami School of Medicine.

Multiple requests failed to obtain photographs of Drs. Lombardo, Yunis and Harkness for publication.

Dr. Newcomb

GENERAL SESSION SPEAKER

George T. Pack, M.D., New York City, "Cancer Therapy: A Perspective and Prospective View." Dr. Pack is the guest of Dr. Samuel M. Day, President of the Association.

Dr. Pack

Dr. Millard

Dr. Morgan

Dr. Hamilton

Dr. Wilson

Dr. Harkins

Dr. Cooley

Dr. Howarth

SECTION ON TRAUMA

D. Ralph Millard, M.D., Miami, Bernard L. M. Morgan, M.D., Jacksonville, John M. Hamilton, M.D., St. Petersburg, "Facial Trauma;" Leo H. Wilson Jr., M.D., Sarasota, "Immediate Plastic Repair of Some Soft Tissue Digital Injuries;" Henry N. Harkins, M.D., Professor and Chairman, Department of Surgery, University of Washington School of Medicine, Seattle, Wash., "Practical and Controversial Items in the Care of Major Abdominal Trauma;" Denton A. Cooley, M.D., Professor of Surgery, Baylor University College of Medicine Houston, Texas and J. Cornall Howarth, M.D., Orlando moderator of panel following presentations.

Seventh Annual Conference of County Medical Society Presidents and Secretaries

On January 23 and 24, 1965, the Annual Conference of County Medical Society Presidents and Secretaries was held for the seventh consecutive year. As last year, the two day meeting took place at the Robert Meyer Motor Inn in Orlando. In attendance were 101 physicians from 33 societies representing 97.5% of the membership of the Florida Medical Association, the sponsoring organization. The total number of registrants was 131. The representation continues to increase each year.

Presiding over the opening session, Dr. Samuel M. Day, President, stressed the important role of the county society officers in promoting a closer relationship between the Association and its component county societies. He then introduced the guest speaker, Mr. Leo Brown, Executive Assistant to Dr. F. J. L. Blasingame, Executive Vice President of the American Medical Association, who was to have attended.

Mr. Brown reviewed some of the many programs the AMA carries on in addition to legislation, which newspapers lately have portrayed as its sole interest. On behalf of the AMA Council on Drugs, he requested physicians to report instances of adverse reactions to drugs, and thereby render a real service by helping to evaluate the many new drugs and establish contraindications to their use. This information is disseminated as rapidly as possible to the entire membership through the Journal of the American Medical Association. For half a century the AMA has promoted medical education, always advocating programs to increase the number of qualified physicians. Many difficulties incident to the influx of 15,000 foreign-born physicians have in recent years been overcome. In Miami, for example, $60,000 was spent for Cuban physicians.

A Department of Hospitals has been established, Mr. Brown reported, to keep the professional staffs of hospitals informed as to their rights. The general public should look to them rather than to the lay staff to improve the quality of care in the hospitals. Also, physicians should have an initial role in the area-wide planning of hospitals. Through the cooperation of the National Education Association over a period of 50 years, the impact of the AMA health education program has been great.

In government medical programs, major activity now centers on the private practitioner. In compliance with the Peace Corps' request for help, a program was soon worked out to the advantage of the physician. Forty-seven states now have the Kerr-Mills program. Physicians in other countries look on the United States as the last bulwark of private practice. The AMA cooperates with representatives of other countries in an effort to provide leadership in world health. The physician placement program in the international field has grown by leaps and bounds. In the field of medical ethics, the major effort is on the national medical scene with legislative problems paramount. The AMA endeavors to provide leadership through the leaders sent to it from the county and, in turn, the state societies. Never has there been a time, Mr. Brown concluded, when leadership was more needed or when the country needed more to know that the medical profession is dedicated to providing the kind of care the country should have.

Participants in the Medical Services Panel and their subjects were: Dr. Irving E. Hall Jr., Chairman, Council on Medical Services, who served as moderator, and Drs. Nelson Zivitz, Chairman, Committee on Indigent Care, "Current Problems;" William R. Daniel, Chairman, Committee on Aging, "Home Care Programs;" Simon D. Doff, Assistant State Health Officer and Director, Bureau of Special Services, Florida State Board of Health, "Improvements Needed — Outpatient and Clinic Care;" and James M. Ingram, Chairman, Committee on Maternal Health, "Maternal Health." Dr. Zivitz reviewed the Indigent Care Program in Florida, which is administered by the State Welfare Department, and explained requirements for eligibility. Dr. Daniel noted the lack of a complete home care program in Florida to supplement hospital services and advocated coordination of the two programs. He stressed the importance of a physician on the home care team and discussed ways to establish such a program. Stating that 58 hospitals now have outpatient care, Dr. Doff reviewed some of the service problems faced in many quarters with indigent and medically indigent patients. The multiplicity of specialty clinics leaves many of them with many consultants but no personal physician. A study shows that some are treated in several clinics for the same illness. Hospitals are faced with an increase in emergency room services which creates a financial problem when often such care is not needed. Dr. Ingram cited a maternal mortality survey which revealed that Florida has the lowest rate in the Southeastern states. He discussed a bill to be presented to the 1965 legislature which will aid obstetricians and gynecologists and other physicians as well. The annual Obstetric-Pediatric Seminar will be held this year in Cocoa.

The Medical Economics Panel was moderated by Dr. Jack A. MaCris, Chairman, Council on Medical Economics. Dr. Henry J. Babers Jr., Chairman, Committee on Fee Schedules, discussed the current status of the Relative Value Studies, Blue Shield, Workmen's Compensation, Medicare, Vocational Rehabilitation and other programs. He deplored overuse of Blue Shield and reported overall progress in these various projects. "Insurance Review Committees and Utilization Committees" was the subject presented by Dr. David J. Lehman Jr., Chairman, Committee on Health Insurance. He emphasized that the review committee is not a disciplinary group; it makes recommendations only. Substituting for Dr. L. Washington Dowlen, Chairman, Committee on Hospitals, Dr. Day commented on "Area-Wide Hospital Planning." Hospital planning should be area-wide, he said, and county medical societies should take responsibility in their respective areas.

Dr. Joseph C. Von Thron, Chairman, Council on Legislation and Public Agencies, spoke on "National Legislation," covering the Medicare bill's recent status, and "State Legislative Program" was the subject presented by Dr. George S. Palmer, Chairman, Committee on State Legislation.

FMA-sponsored programs were presented by Dr. Floyd K. Hurt, Chairman, FMA Investment Plan Committee, and Dr. H. Lawrence Smith, Chairman, Committee on Members Insurance. Dr. Hurt explained the Association's investment plan and Dr. Smith its insurance program.

Dr. H. Phillip Hampton, President-Elect, presided over the Sunday morning session. The first speaker was Dr. Mason Romaine III, Chairman, Council on Voluntary Health Agencies, who described the past, present and future activities of his Council and explained the FMA program for recognizing voluntary health agencies.

"Medicine and Religion," a subject evoking special interest, was presented by Mr. Charles A. Hubbard, Department of Medicine and Religion, AMA. A suggestion from Oregon in 1960 initiated the establishment of such a department. Pilot programs were established in 20 states and by 1963 the program had spread to 47 states. Encouraging rapport between ministers and doctors brings gratifying results beneficial to the patient. When the doctor knows the patient's minister, he can learn much about the mental and spiritual needs of the patient so necessary to the treatment of the whole man. This AMA program is not a social project and no questions are asked concerning the ethics of any one faith. It is applicable in the smaller communities as well as in the metropolitan areas and the doctor is in a position to invite ministers of all faiths to informal gatherings. Dr. Curtis D. Benton Jr. heads the Association's committee to promote this project in Florida.

The remainder of the morning session was devoted to discussion of the problems of the county medical societies, large, medium and small. The speakers were Drs. Richard M. Fleming, President, Dade County Medical Association, Earl G. Wolf, President, Escambia County Medical Society, and Argin A. Boggus Jr., President, Lake County Medical Society. Open discussion followed.

Maternal Deaths in Florida

The third annual Maternal Mortality Survey was conducted in 1963 by the Committee on Maternal Health. Out of 114,729 live births, 38 maternal deaths were reported. One death occurred out of state, and another under the care of an osteopath. Thirty-six deaths were therefore studied and all were classifiable. All physicians concerned responded promptly and usually in excellent detail.

The data obtained, expressed in maternal deaths per 10,000 live births, are summarized as follows:

Maternal Death
Florida — 1963

Total live births — 114,729
Total maternal deaths — 38
Total maternal death rate — 3.3
Maternal death rate — white — 1.4
Maternal death rate — nonwhite — 8.4

Although the total number of births was only 519 less than in 1962, this figure represents a substantial drop in the state birth rate. A minimum of 200,000 people move to Florida each year, and about 50,000 of these are women in the childbearing age. Florida has followed the national trend in showing a definite decline in birth rate.

Between 1962 and 1963 there was a significant and gratifying drop in the Florida maternal death rate from 4.7 to 3.3. The ratio of deaths between nonwhite and white remained at 4.1. Florida's death rate in 1963 approached the national rate of 3.0 and was considerably below the South Atlantic States rate of 5.14.

Like most states, Florida continues to use the American Medical Association National Classification System of maternal deaths. This uniform system allows valid comparison of rates of the various states and regions and of the nation. A recent report in the Journal of the American Medical Association (July 27, 1964, Vol. 189, pp. 321-325) pointed out two salient facts: First, none of the vital statistics of infant and maternal mortality is more than 90 to 95 per cent accurate. Second, comparison of these data between the United States and European or other nations is virtually useless because of the wide variation in criteria of live birth and maternal death.

Classification by Diagnosis

The 36 maternal deaths were classified, according to AMA standards, as follows:

I. Direct — 32
- A. Hemorrhage — 11
  - Uterine atony, term — 4
  - Rupture of uterus — 3
  - Ectopic pregnancy — 2
  - Cervical laceration, term — 1
  - Retained placenta, term — 1
- B. Toxemia — 5
  - Plus secondary diagnosis in 4
- C. Infection — 7
  - Criminal abortion — 2
  - Spontaneous abortion — 2
  - Term, postpartum — 2
  - Term, intrapartum — 1
- D. Vascular Accidents — 6
  - Amniotic fluid infusion — 3
    - (all confirmed by autopsy)
  - Thrombotic embolism — 3
    - (2 confirmed by autopsy)
- E. Anesthesia — 3
  - (1 confirmed by autopsy)

II. Indirect — 4
- A. Cardiac disease
  - Acute failure — 1
- B. Vascular
  - H C V D — 1
  - C V A — 1
- E. Hepatic disease
  - Acute viral hepatitis — 1

III. Nonrelated
- None

The most interesting aspect of these diagnoses is that vascular accidents, including amniotic fluid infusion and thrombotic embolism, have again ranked with hemorrhage, toxemia and infection as a fourth major cause of death. The Committee has been particularly stringent in its criteria for accepting diagnoses in this category. On a national scale, amniotic fluid infusion has replaced cardiac arrest as a "waste basket" diagnosis covering otherwise unexplained deaths. William Benbow Thompson, Chairman of our counterpart committee in California, has recently directed attention to the error of both clinicians and pathologists in establishing this diagnosis (presented to the American Association of Obstetricians and Gynecologists, September 1964, to be published). The rising proportion of death due to vascular accidents, with the control and decline of the other three major causes, was predicated by the Florida Committee in its report of last year.

Even though the total number of deaths decline each year, the number of deaths due to anesthesia remains fixed at three. Most obstetric anesthesia is given by nurse anesthetists. The critical shortage of both physicians and nurses for the administration of anesthesia contributes heavily to the death rate from this cause.

Factors of Preventability and Responsibility

These factors, always the most difficult to assess, were classified as follows:

Factors of Preventability
None — 18
Patient — 11
Doctor — 6
Both — 1

Factors of Responsibility
None — 18
Patient — 10
Doctor — 6
Both — 2

When factors of preventability and responsibility were attributed to the physician, it was almost always in deaths due to hemorrhage. These deaths were thought preventable by avoidance of procedures that produce hemorrhage, by earlier recognition of both internal and external hemorrhage, and by earlier and more vigorous blood replacement.

When the factors implicated the patient, death was most frequently due to toxemia. Self neglect and poor cooperation caused most toxemia deaths. Undertreatment by the physician was rare.

The Committee on Maternal Health has no new recommendations this year. Its prime recommendation remains the passage of the proposed Bill for the Protection of Scientific and Investigative Studies by the 1965 Florida Legislature. This bill, already passed by many states, would safely allow the Maternal Mortality Survey to function more intimately and helpfully with each physician. More important, it would grant immunity to our profession's committees providing self discipline at all levels.

Gratitude is again due to the responding physicians for their excellent cooperation, and to the members and advisors of the Committee for their unfailing efforts.

James M. Ingram, M.D.
Chairman
Committee on Maternal Health

Deaths

Fitz Gerald, Maurice David, Hollywood; born in Chicago on June 6, 1913; Stritch School of Medicine of Loyola University, Chicago, 1937; interned and served residencies at Mercy Hospital and Little Company of Mary Hospital, Chicago; later engaged in postgraduate study at Oak Ridge and Indiana University School of Medicine; was an instructor in medicine at his alma mater from 1937 to 1950 with the exception of five years during World War II when he was a major in the Army Medical Corps serving with distinction in the Southwest Pacific; was an associate in radiology at Cook County Hospital, Chicago from 1946 to 1950; was director of radiology at St. Mary's Hospital, Evansville, Ind., from 1950 to 1961; after one year as associate radiologist in St. Margaret's Hospital, Peru, Ill., became an associate radiologist at Mercy Hospital in Miami in 1963 and in 1964 at Memorial Hospital, Hollywood; held membership in the American Medical Association, American College of Radiology, British Institute of Radiology, Radiological Society of North America, Society of Tropical Medicine and American Geriatric Society, and was a diplomate of the American Board of Radiology; was the founder and first president of the Tri-State Radiological Society in Indiana; died Dec. 27, 1964, aged 51.

Fox, Harold Henry, Miami; born in Ashford, N. Y., on June 30, 1887; University of Buffalo School of Medicine, Buffalo, N. Y., 1912; served an internship at Rochester State Hospital, Rochester, N. Y., and residencies at Cornell University Hospital, Ithaca, N. Y., from 1912 to 1916; entered the general practice of medicine in Miami in 1916 and continued to practice there for 50 years; was a veteran of World Wars I and II; held membership in the American Medical Association, South Eastern Surgical Congress and International College of Surgeons; died Sept. 10, 1964, aged 77.

Huey, Thomas Ford, Jr., Fort Lauderdale; born in Anniston, Ala., April 16, 1907; Vanderbilt University School of Medicine, Nashville, Tenn., 1932; interned at Duke University Hospital, Durham, N. C., and served residencies at Michael Reese Hospital, Chicago, Vanderbilt Hospital and Johns Hopkins Hospital, Baltimore, in ophthalmology and otolaryngology; was a veteran of World War II, serving from 1942 to 1945 as a lieutenant colonel in the Medical Corps of the Army of the United States; practiced from 1935 to 1948 in Anniston, except for the war years, and thereafter in Fort Lauderdale; was a past president of the Broward County Medical Association and of the Calhoun County (Ala.) Medical Association while in practice in Anniston; held membership in the American Medical Association, Southern Medical Association and the Florida Society of Ophthalmology and Otolaryngology; died suddenly of acute coronary insufficiency, Dec. 8, 1964, aged 57.

McConnell, James Franklin, Evansville, Ind.; born in Boonville, Ind., Aug. 22, 1921; Indiana University School of Medicine, Indianapolis, 1959; interned at St. Vincent's Hospital, Indianapolis, and served briefly at Broward General Hospital, Fort Lauderdale, before entering military service late in 1961 as a lieutenant in the Navy Medical Corps; resumed general practice in Fort Lauderdale early in 1964; returned to Evansville in November and died Dec. 8, 1964, aged 43.

Meetings

March

Seminar in Obstetrics and Gynecology, March 4-5, University of Florida College of Medicine, Gainesville

Watson Clinic Seminar, "Recent Advances in Diagnosis and Therapy," March 6, Watson Clinic, Lakeland

Third Postgraduate Seminar, "Gastrointestinal Roentgenology," sponsored by Department of Radiology, University of Miami School of Medicine, and Jackson Memorial Hospital, March 17-20, Fontainebleau Hotel, Miami Beach.

"Principles in the Rehabilitation of the Physically Handicapped," March 22-26, Rehabilitation Center, Miami.

April

Florida Medical Association, 91st Annual Meeting, April 22-25, Hotel Americana, Bal Harbour, Miami Beach.

The Doctor's Visit, Jan Steen 1626-1679, Mauritshuis, The Hague

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1. Welch, C. E., Diverticula of the Alimentary Tract, in Conn, H. (editor): Current Therapy—1961, Philadelphia, W. B. Saunders Company, 1961, pp. 224-225.

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News

The 19th annual meeting of the Florida Association of Blood Banks will be held at the Robert Meyer Motor Inn, Orlando, April 30-May 2. Persons planning to attend should make reservations directly with the Inn.

Recent appointees to the Medical Advisory Committee of the Division of Vocational Rehabilitation are Drs. Jere W. Annis, Lakeland; Roy E. Campbell, Palatka; Newton C. McCollough, Orlando, and Donald E. Warren, West Palm Beach. Dr. Merredith Mallory of Orlando is State Medical Consultant.

The North Florida Pathologists Association will hold its regular meeting at 8:00 p.m., Thursday, March 18, at St. Vincent's Hospital, Jacksonville. The meeting will consist of a slide seminar moderated by Dr. R. Calixto Iniguez of Waycross, Ga.

The Division of Otolaryngology of the University of Miami School of Medicine has announced the opening of the Section of Audiology and Speech Pathology in new quarters in the Out-Patient Building of Jackson Memorial Hospital. Dr. Nathaniel M. Levin of Miami has been appointed Medical Director of the Section.

The 1965 Scientific Session of the American Cancer Society is being held at the Drake Hotel in Philadelphia on June 16.

The American College of Physicians is presenting a postgraduate course in cardiology at Grady Memorial Hospital in Atlanta March 15-19. It is being arranged by Emory University School of Medicine.

The first progress report in preparation of the Standard Nomenclature of Sports Injuries by the Committee on the Medical Aspects of Sports of the American Medical Association will be available the first of April.

The Ninety-First Annual Meeting of the Florida Medical Association is being held in the Americana Hotel, Bal Harbour, Miami Beach, April 22-25. Hotel reservations may be made direct by using the business reply card soon to be sent all members of the Association.

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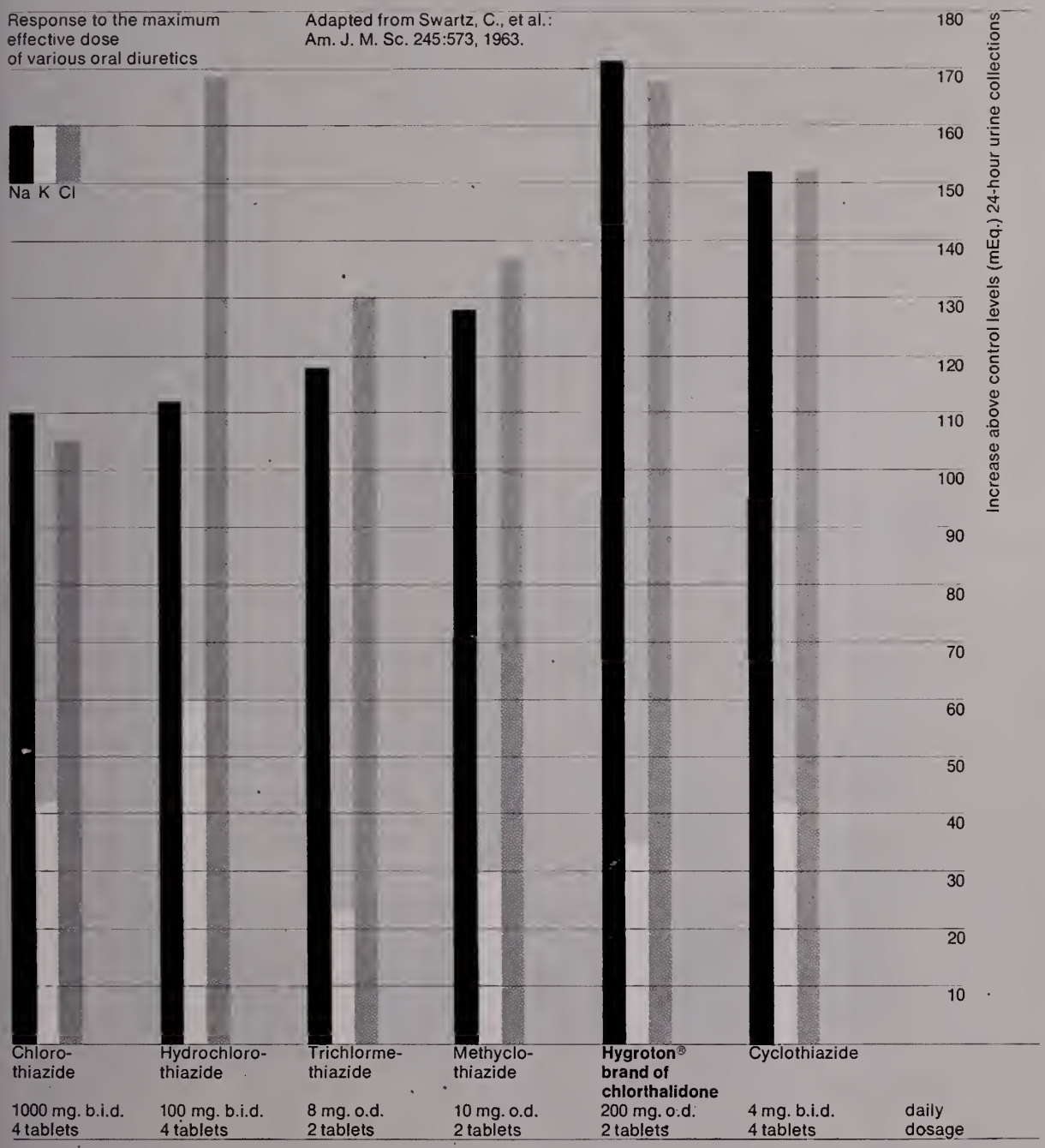

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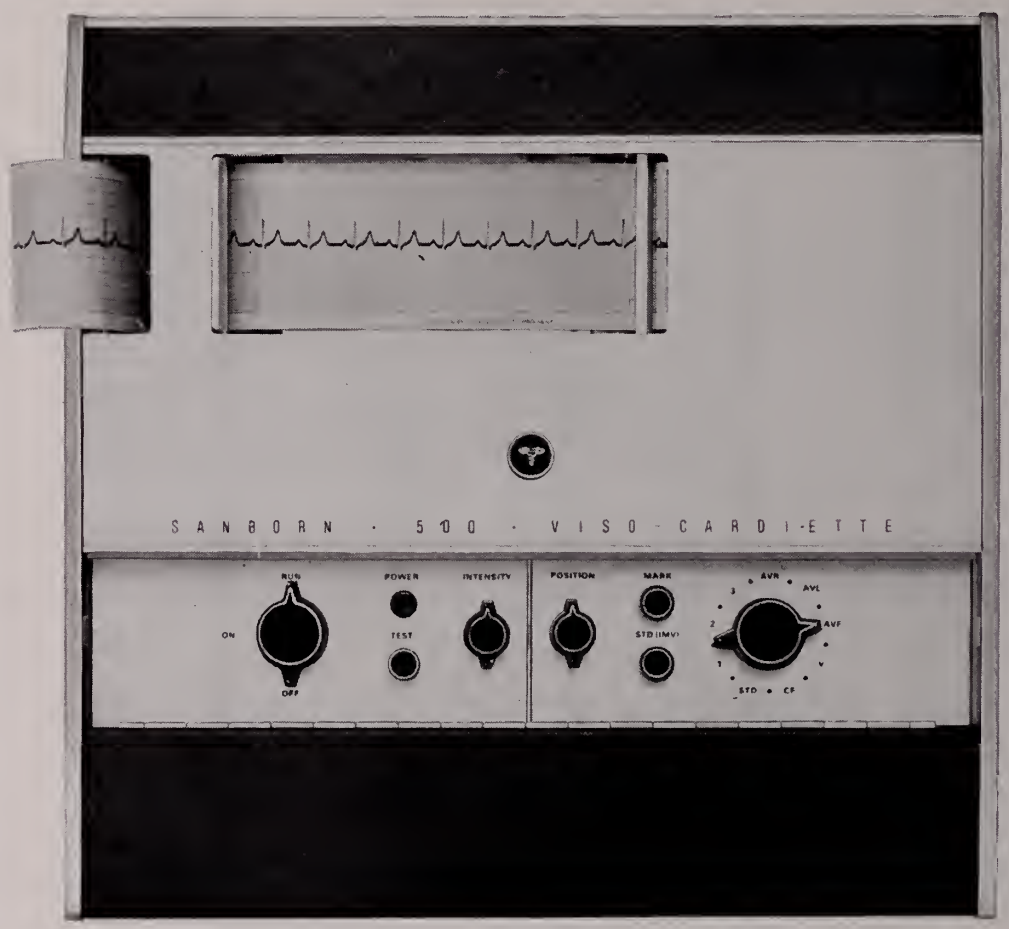

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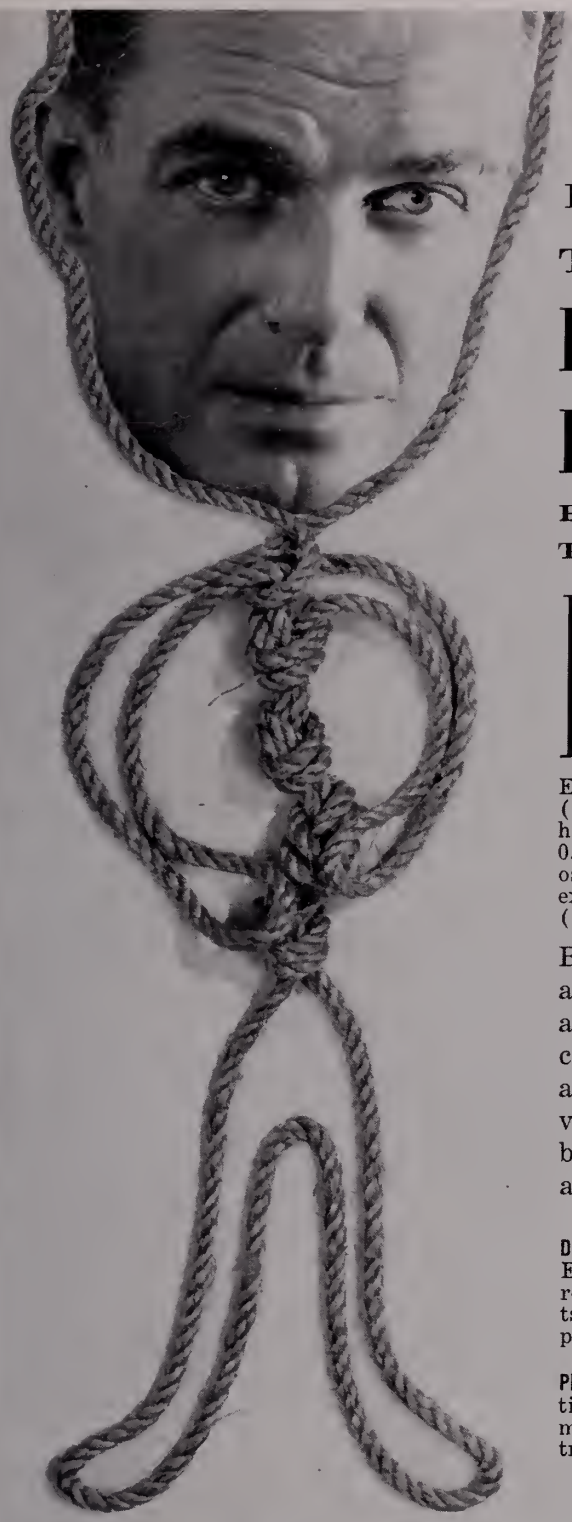

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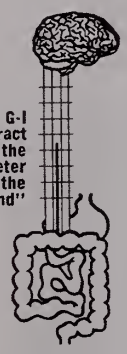

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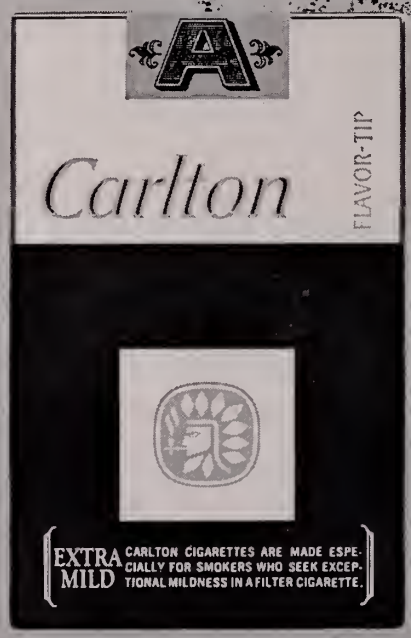

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*Morador, J. L. et al.: Antibiot. Ann. 1959-1960:716.

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Signemycin® Bibliography
1. Adams, J.: J. Tenn. Med. Ass. 50:446, Nov., 1957. **2.** Arachi, N. and Gheradi, F.: Quad. Urol. 9:156, Apr.-June, 1959. **3.** Arneil, G. C.: Antibiot. Ann. 1958-1959:327. **4.** Arrigoni, G. et al.: Minerva Med. 48:2701, Aug. 25, 1957. **5.** Baur, A.: Aerztl. Prax. 11:1845, Dec. 5, 1959. **6.** Bellomio, S. et al.: Riv. Ital. Tracoma, vol. 10, Nos. 1-2, Jan.-June, 1958. **7.** Bellomio, S. et al.: Riv. Ital. Tracoma, vol. 11, No. 1, Jan.-Mar., 1959. **8.** Belonoschkin, B. and Lindgren, M.: Svensk. Lakartidn. 56:2134, July 31, 1959. **9.** Bergdahl, U.: Svensk. Lakartidn. 55:1715, June 6, 1958. **10.** Bhattacharyya, M. N. and Bhuyan, J. N.: Antiseptic 56:611, Aug., 1959. **11.** Blass, R.: Schweiz. Med. Wschr. 89:158, Feb. 7, 1959. **12.** Bolognesi, C.: Minerva Med. 48:2695, Aug. 25, 1957. **13.** Candela, R. B.: Med. Esp. 46:273, Oct., 1961. **14.** Cappelli, E.: Minerva Med. 48:2690, Aug. 25, 1957. **15.** Carter, C. H. and Maley, M. C.: Antibiot. Ann. 1956-1957:51. **16.** Caruselli, M. and Musca, A.: Minerva Med. 51:3516, Oct. 17, 1960. **17.** Ceitlin, J.: Med. Panamer. 15:72, Aug. 1, 1960. **18.** Chattas, A. et al.: Antibiot. Med. 7:300, May, 1960. **19.** Chiarenza, A.: Minerva Med. 48:2692, Aug. 25, 1957. **20.** Cooper, J. et al.: Antibiot. Med. 5:302, May, 1958. **21.** Cupples, J. F. B. and Perry, A. W.: Canad. Med. Ass. J. 77:699, Oct. 1, 1957. **22.** David, N. A. and Carter, P. B.: Rocky Mountain Med. J. 58:27, Mar., 1961. **23.** Davis, W. G.: Clin. Rev. 1:21, Apr., 1958. **24.** de Lellis, J.: Dia Med., Apr. 24, 1958, p. 824. **25.** Dienz, H.: Aerztl. Prax. 13:1797, 1961. **26.** Dietel, V. and Meissner, F.: Deutsch. Gesundh. 16:2470, Dec. 28, 1961. **27.** Dryjski, J.: Pol. Tyg. Lek. 24:1113, June 24, 1959. **28.** Durrieu, C. A. et al.: Antibiot. Ann. 1958-1959:297. **29.** Faz Tabio, H.: Rev. Cuba. Pediat. 30:219, Apr., 1958. **30.** Febles Alonzo, D. and Batthyany, C.: Actas Ginecotocol. (Uruguay) 13:4, Aug., 1959. **31.** Febles Alonzo, D. and Biderman, I.: Antibiot. Ann. 1958-1959:270. **32.** Fiora, F. and Compa, F.: Dia Med., Apr 3, 1958, p. 570. **33.** Garre, E.: Antibiot. Med. 7:285, May, 1960. **34.** Geiger, K.: Praxis 15:365, Apr. 9, 1959. **35.** Gemma, G. B. et al.: Minerva Med. 48:2643, Aug. 25, 1957. **36.** Gerner, G.: Arzneimittelforschung 9.484, Aug., 1959. **37.** Grazia, G.: Clin. Pediat. (Bologna) 41:1005, Nov., 1959. **38.** Greco, O.: Med. Condotto-Med. Prat. 9:497, 1958. **39.** Hammerl, H.: Wien. Med. Wschr. 108:629, July 26, 1958. **40.** Henne, H. F.: Med. Klin., No. 29, July 18, 1958, p. 1267. **41.** Heredia Diaz, J. et al.: Medicina (Mex.) 38:308, July 10, 1958. **42.** Herrera, W. A.: Dia Med. 30:3116, Dec. 8, 1958. **43.** Hoffmann, H.: Medizinische (Stuttgart) 45:1830, Nov. 8, 1958. **44.** Kelleher, D.: Practitioner 182:227, Feb., 1959. **45.** Kleine, W. and Hagen, H.: Ther. Gegenw. 98:171, Apr., 1959. **46.** Klovstad, O.: T. Norsk. Laegeforen. 77:681, Aug. 15, 1957. **47.** Kobari, K. and Tajiri, I.: Naika No Ryoiki (Field of Internal Medicine) 7:245, May, 1959. **48.** Kohler, H. F.: Clin. Rev. 1:16, Apr., 1958. **49.** Kraljevic, R. et al.: Antibiot. Med. 5:364, June, 1958. **50.** La Caille, R. A. and Prigot, A.: Antibiot. Ann. 1956-1957:67. **51.** Lapeyre, L. et al.: Marseille Med. 99:953, 1962. **52.** Levi, W. M., Jr. and Kredel, F. E.: J. S. Carolina Med. Ass. 53:178, May, 1957. **53.** Loughlin, E. H. et al.: Antibiot. Ann. 1958-1959:293. **54.** Loughlin, E. H. et al.: Antibiot. Med. 7:739, Dec., 1960. **55.** Mathur, S. N. and Joshi, V. S.: J. Indian Med. Ass. 34:437, June 1, 1960. **56.** Moggian, G.: Minerva Med. 48:2648, Aug. 25, 1957. **57.** Molinelli, E. A. et al.: Antibiot. Ann. 1957-1958.692. **58.** Montilli, G. and Avellino, M.: Dermatologica (Basel) 9:2, 1958. **59.** Morador, J. L. et al.: Antibiot. Ann. 1959-1960:716. **60.** Morador, J. L. and Saldana Tate, L.: An. Ateneo, Clin. Quirur. 1:52, Jan., 1958. **61.** Morel, A. S.: Clin. Rev. 1:18, July, 1958. **62.** Morey, G. S. et al.: Rev. Hosp. Nino (Lima) 18:293, 1957. **63.** Ottolenghi, C. E. et al.: Bol. Soc. Cir. B. Air. 41:739, Nov. 6, 1957. **64.** Pagola, J. G. et al.: Antibiot. Ann. 1958-1959:287. **65.** Pavone, M. et al.: Minerva Urol. 70:121, Sept.-Oct., 1958. **66.** Porrazzo, F.: Gazz. Med. Ital. 118:550, Dec., 1959. **67.** Prats, F. and de la Parra, M. A.: Antibiot. Ann. 1959-1960:484. **68.** Prokop, O.: Prakt. Arzt. 12:145, Feb. 15, 1958. **69.** Ramirez Boettner, C. M. et al.: Rev. Med. Paraguay 5:269, July-Sept., 1960. **70.** Randig, K.: Deutsch. Med. J. 8:447, Aug. 15, 1957. **71.** Saavedra Amaro, S. and Lopez Zepeda, L.: Medicina (Mex.) 38:396, Aug. 25, 1958. **72.** Saldana Sotomayor, F.: Medicina (Mex.) 39:191, May 10, 1959. **73.** Santos, A.: Rev. Brasil. Med. 16:463, July, 1959. **74.** Schenone, H.: Antibiot. Ann. 1958-1959:316. **75.** Schunk, A.: Int. Rec. Med. 173:143, Mar., 1960. **76.** Sgarzini, L. and Amato, R.: Ann. Stomat. 7:499, July, 1958. **77.** Shubin, H.: Antibiot. Med. 4:174, Mar., 1957. **78.** Sundberg, R. H.: Antibiot. Med. 7:115, Feb., 1960. **79.** Talbot, J. R.: Wisconsin Med. J. 57:237, June, 1958. **80.** Tato, J. M. et al.: Antibiot. Ann. 1957-1958:675. **81.** Weithofer, W.: Medizinische (Stuttgart) No. 33-34:1490, Aug. 22, 1959. **82.** Willcox, R. R. and Rosedale, N.: Brit. J. Vener. Dis. 38:19, Mar., 1962. **83.** Willemot, J. P. et al.: Bruxelles Med. 38:1026, June 22, 1958. **84.** Winton, S. S. and Chesrow, E. J.: Antibiot. Ann. 1956-1957:55. **85.** Wolman, B.: Practitioner 185:199, Aug., 1960. **86.** Yodh, B. B.: J. J. J. Group Hosp. 5:183, July, 1960. **87.** Zaldivar, C. G. and Falcone, F. L.: Rev. Hosp. Nino (Lima) 20:141, June, 1958.

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Obstetrical & gynecological infections	341	320
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1. Clinical report on file, Medical Department, A. H. Robins Co., Inc.
2. Schiller, I. W. and Lowell, F. C.: New England J. Med. 261:478, 1959.

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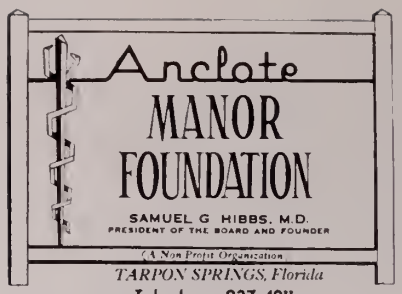

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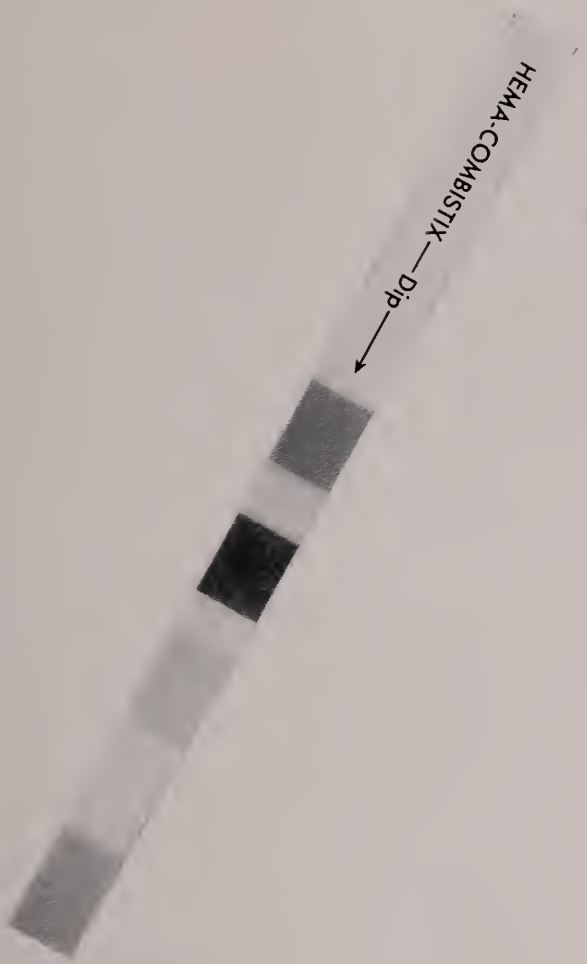

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Precautions: Advise patients against possibly hazardous procedures until maintenance dosage is established. Though compatible with most drugs, use care in combining with other psychotropics, particularly MAO inhibitors or phenothiazines; warn patients of possible combined effects with alcohol. Observe usual precautions in impaired renal or hepatic function, and in long-term treatment. Exercise caution in administering drug to addiction-prone patients or those who might increase dosage; withdrawal symptoms similar to those seen with barbiturates or meprobamate, can occur upon abrupt cessation after prolonged overdosage. Caution should be exercised in prescribing any therapeutic agent for pregnant patients.

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April, 1965
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The JOURNAL of the Florida Medical Association

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*Lennox, W. G.: Epilepsy and Related Disorders, Boston, Little, Brown and Company, 1960, vol. 2, p. 865.

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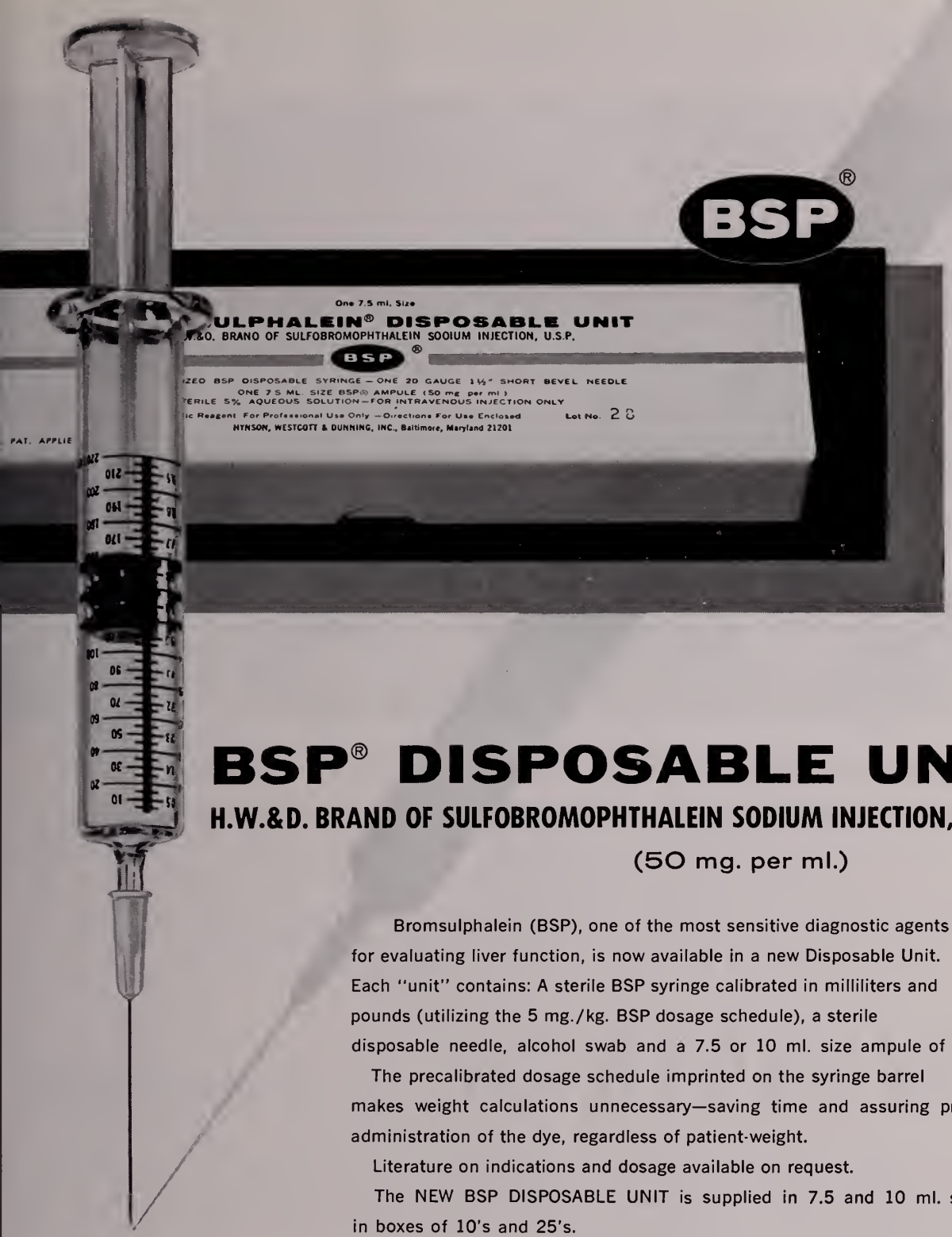

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The JOURNAL
of the Florida Medical Association

Volume 52, Number 4, April 1965

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Supplied: No. 606 – Each capsule contains 250 mg. of ampicillin. Bottles of 16 and 100.

References: 1. Editorial. Brit. M. J. *ii*:223 (July 22) 1961. 2. Rolinson, G. N., and Stevens, S.: Brit. M. J. *ii*:191 (July 22) 1961. 3. Stewart, G. T., *et al.*: Brit. M. J. *ii*:200 (July 22) 1961. 4. Brown, D. M., and Acred, P.: Brit. M. J. *ii*:197 (July 22) 1961. 5. Batchelor, F. R., *et al.*: Nature *183*:257, 1959. 6. Knudsen, E. T., *et al.*: Brit. M. J. *ii*:198 (July 22) 1961. 7. Doyle, F. P., *et al.*: Nature *191*:1091 (Sept. 9) 1961. 8. Acred, P., *et al.*: Brit. J. Pharmacol. *18*:356, 1962. 9. Harrison, P. M., and Stewart, G. T.: Brit. J. Pharmacol. *17*:420, 1961. 10. Editorial. Lancet *ii*:723 (Oct. 5) 1963.

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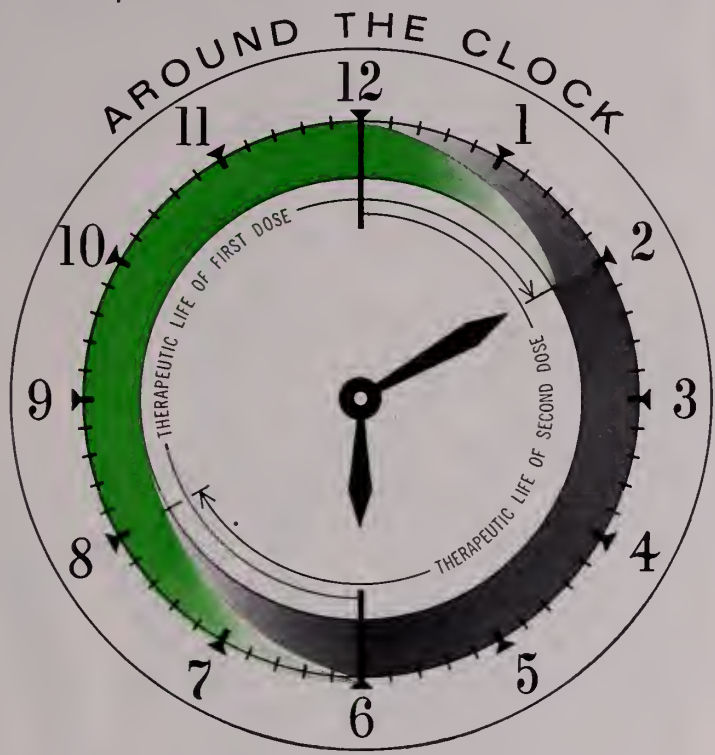

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SIDE EFFECTS, PRECAUTIONS, CONTRAINDICATIONS: As used for anxiety and tension, side effects are unlikely. Reversible extrapyramidal reactions may develop occasionally. In higher doses for psychotic disorders, patients may experience excessive drowsiness, visual blurring, dizziness, insomnia (rare), allergic skin reactions, nausea, anorexia, salivation, edema, perspiration, dry mouth, polyuria, hypotension. Jaundice has been exceedingly rare. Photo-sensitivity has not been reported. Blood dyscrasias occur with phenothiazines; routine blood counts are recommended. If symptoms of upper respiratory infection occur, discontinue the drug and institute appropriate treatment. Do not use epinephrine for hypotension which may appear in patients on large doses undergoing surgery. Effects of atropine may be potentiated. Do not use with high doses of hypnotics or in patients with subcortical brain damage. Use cautiously in convulsive disorders.

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†Phosphorus ..... 39 mg. (1/20 MDR)
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MDR—Adult Minimum Daily Requirement.

Supplied: Jar of 60

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Phosphorus (as Dibasic Calcium Phosphate). 110 mg. (⅙ MDR)
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Magnesium (as Magnesium Oxide) ..... 1 mg.
Potassium (as Potassium Sulfate).. 5 mg.
Iodine (as Potassium Iodide) ..... 0.1 mg. (1 MDR)
Copper (as Copper Oxide)..... 1 mg.
*Manganese (as Manganese Dioxide) ..... 1 mg.
*Zinc (as Zinc Oxide) ..... 0.5 mg.
*Choline Bitartrate ..... 50 mg.
*Inositol ..... 50 mg.
l-Lysine Monohydrochloride ..... 25 mg.

MDR—Adult Minimum Daily Requirement

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ıpeutic effects
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toms is quite frequently accompa-
by increased appetite, gain in weight
an improved sense of well-being.

nitial response is usually maintained
ut dosage increases; indeed, ini-
osage is often reduced for mainte-
e purposes.

ylate or steroid therapy can usually
minished or, in some instances,
nated.

iatic arthritis responds in the same
as rheumatoid arthritis but the skin
ns are usually not affected either fa-
ply or adversely by treatment.

Precautions
Before prescribing, the physician should obtain a complete history and perform a complete physical and laboratory examination, including a blood count.

The patient should be kept under close supervision and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools.

If coumarin-type anticoagulants are given simultaneously, the physician should watch for excessive increase in prothrombin time.

Side effects
The most common side effects are nausea, edema and drug rash. Infrequently, agranulocytosis, generalized allergic reaction, stomatitis, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug.

Contraindications
These include: edema, hypertension, or danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when other potent chemotherapeutic agents are given concurrently because of the increased possibility of toxic reactions; when the patient cannot be seen regularly; when the patient is senile.

Note: The physician should be fully aware of dosage, precautions, side effects and contraindications as contained in the complete prescribing information.

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Each capsule contains:

phenylbutazone	100 mg.
dried aluminum hydroxide gel	100 mg.
magnesium trisilicate	150 mg.
homatropine methylbromide	1.25 mg.

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will calm your anxious working patient—with little or no drowsiness

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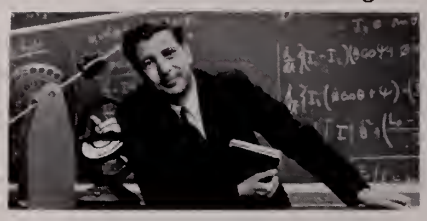

Stoll[1] used the drug in 50 patients with anxiety, and noted: "There was no drowsiness in this group of patients and, because of their alertness and less impaired concentration, they were able to continue with and, in some cases, return to their daily work."

Stelazine (trifluoperazine, SK&F) produces a fast therapeutic response—often within 24 to 48 hours. The convenient b.i.d. regimen frees patients from the need for a midday dose.

Principal side effects, usually dose-related, may include mild skin reaction, dry mouth, insomnia, fatigue, drowsiness, dizziness, amenorrhea and neuromuscular (extrapyramidal) reactions. Muscular weakness, anorexia, rash, lactation and blurred vision may also be observed. Blood dyscrasias and jaundice have been rare. Use with caution in patients with impaired cardiovascular systems. *Contraindicated* in comatose or greatly depressed states due to CNS depressants and in cases of existing blood dyscrasias, bone marrow depression and pre-existing liver damage.

Before prescribing, see SK&F Product Prescribing Information.

Photograph professionally posed.

1. Stoll, L. J.: The Use of Trifluoperazine ['Stelazine'] in General Practice, M. Press *243*:578 (June 29) 1960.

Smith Kline & French Laboratories, Philadelphia

in maintenance therapy... a working analgesic for the active arthritic

ARTHRALGEN®

Each tablet contains:

Salicylamide	250 mg.
Acetaminophen	250 mg.
Ascorbic acid (Vitamin C)	25 mg.

a working analgesic for the active arthritic

—rapidly relieves early morning stiffness and arthritic pain. It promises a quicker response in most patients because its analgesic ingredients need no metabolic conversion before they act. As a combination of two prominent analgesic drugs, Arthralgen can often establish smoother, more complete pain relief because it synergistically produces more efficient analgesia on lower dosage levels of each.

two proven pain relievers

Arthralgen combines two better-tolerated, time-tested analgesics, acetaminophen and salicylamide, into a pharmacologically sound and therapeutically effective formulation. As Arthralgen, it penetrates tissues promptly and relieves pain rapidly with less likelihood of gastric irritation than aspirin.

sodium-free

Arthralgen contains no sodium. Therefore, it is often a safer and more suitable analgesic for use in the long-term treatments of arthritic patients who have other conditions which require sodium restriction.[1]

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Each tablet contains:

Salicylamide	250 mg.
Acetaminophen	250 mg.
Ascorbic acid (Vitamin C)	25 mg.
Prednisone	1 mg.

To help provide dosage flexibility in patients who require steroids, the basic Arthralgen formula is also available combined with prednisone as Arthralgen-PR. Prednisone is favored as the more advantageous steroid for use in Arthralgen-PR because it shows less tendency toward sodium retention, potassium excretion, and steroid-induced hypertension than that which often accompanies the use of cortisone and ACTH.[2]

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BRIEF SUMMARY

Arthralgen and Arthralgen-PR are indicated in the management of rheumatoid arthritis, acute gouty arthritis, rheumatoid spondylitis, osteoarthritis, bursitis, fibrositis, and neuritis. Arthralgen may be used for analgesia in colds, flu, and various myalgias.

DOSAGE: One or two tablets four times a day. After remission of symptoms dosage should be reduced to the minimum maintenance level.

SIDE EFFECTS: Nausea, GI upset, or mild salicylism may rarely occur. Symptoms of hypercorticoidism dictate reduction of dosage of Arthralgen-PR.

PRECAUTION: Reduction in dosage of Arthralgen-PR given over a long period should be gradual, never abrupt.

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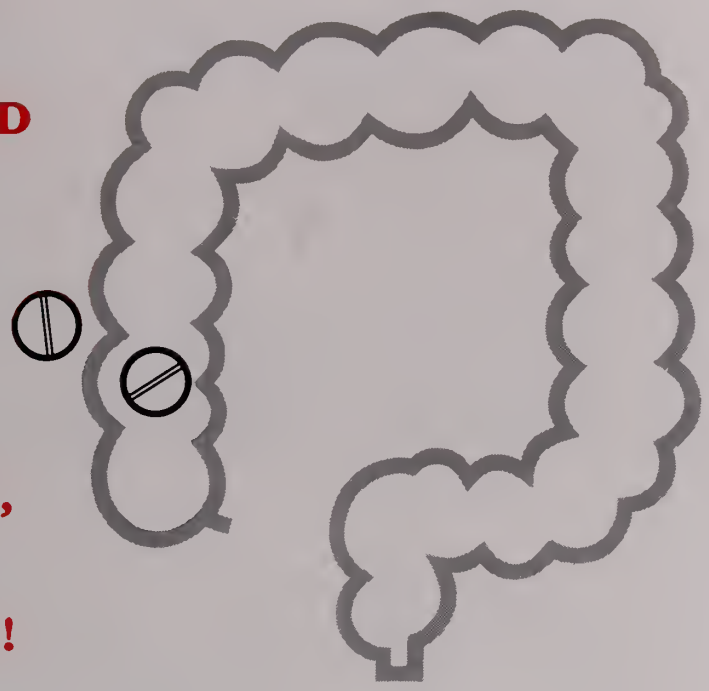

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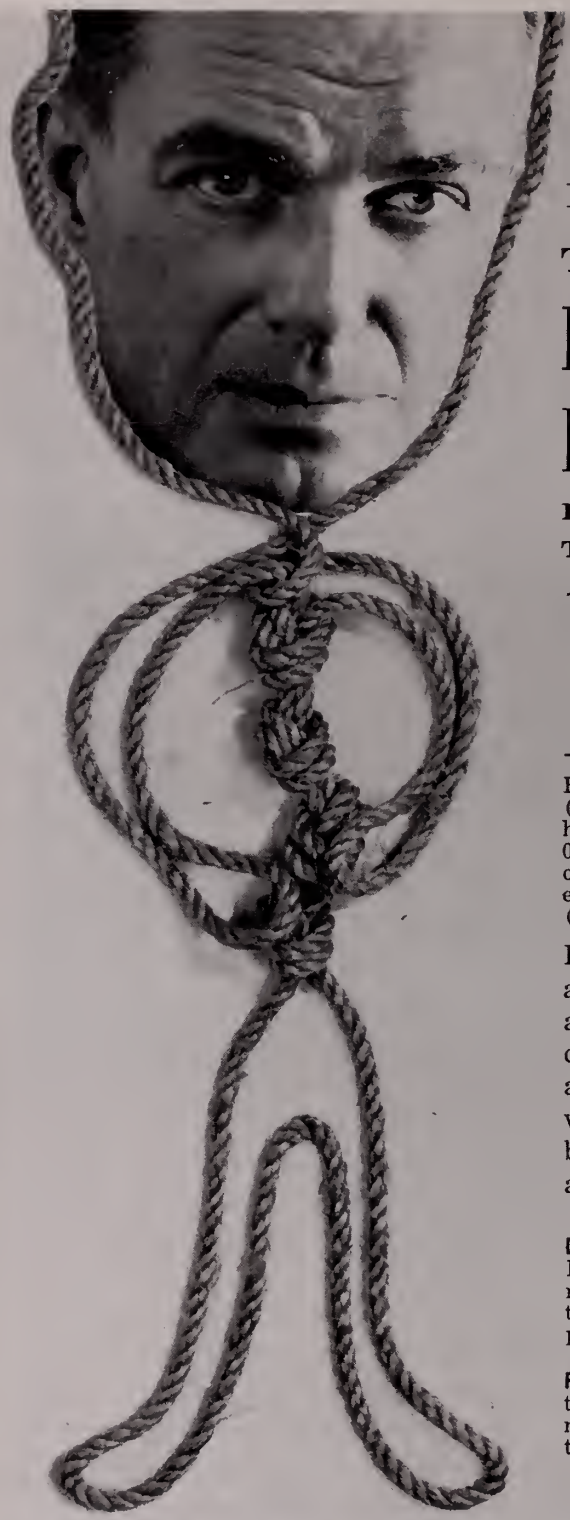

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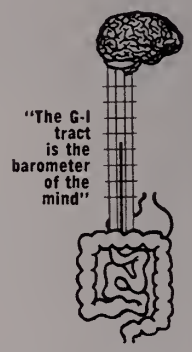

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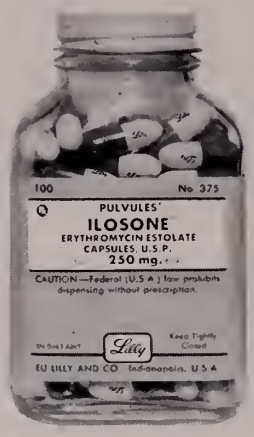

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The JOURNAL
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Diagnosis, Please

Vincent Marchese, Lt. Col., USAF, MC
and John C. Lipsey, M.D.
PENSACOLA

The exceptional size of the abdomen of the patient was first noted when he was seven months of age. A slow but progressive enlargement continued until he was 20 months of age, after which the size of the abdomen seemed to remain stationary. No related signs or symptoms such as abdominal pain, nausea and vomiting, peripheral edema, jaundice, or urinary abnormalities were observed.

When the child was 20 months of age, an intravenous pyelogram, blood studies and liver function tests were performed and gave normal results. A barium enema examination was interpreted as being nonsuccessful and nondiagnostic. One paracentesis was attempted, but no fluid was obtained. The following day 300 cc. of clear serous fluid was removed which proved to be a transudate that was negative on culture and cell block study.

At 28 months of age, the child was subjected to physical examination with negative results except for a protuberant, doughy abdomen, with dullness on percussion, but no fluid wave. An upper gastrointestinal series revealed marked displacement of the stomach and small bowel cephalad with suggestion of an encysted fluid mass in the abdomen causing this displacement. Surgical exploration was performed.

At surgery a large cyst containing approximately 1,000 cc. of fluid was found posterior to the posterior parietal peritoneum and extending to the left beneath the descending colon (fig. 1). A second cyst about the size of a large grapefruit was also found at the root of the mesentery. Both were removed successfully by sharp and blunt dissection although the large cyst was ruptured during removal. The boy was discharged on the fifth postoperative day in good condition, and follow-up in two months revealed the child to be healthy and normal in all respects.

Pathologic report: Gross: One large cystic mass having a diameter measuring 15 cm. in length contains within the wall a smaller cyst measuring 3.0 cm. in diameter. The external surface is pale yellow in color with numerous streaks coursing throughout. The content is a greenish gray cloudy fluid. A second cyst, measuring 4 to 5 cm. in diameter was filled with thick brown mucilaginous material. Microscopic: Microscopic study revealed lymphangiomas of the mesentery.

Discussion

We think that this case represents the importance of certain negative findings which accompany mesenteric cysts in children. This child was basically normal in every way except for an insidious enlargement of the abdomen. There was no evidence of systemic disease which might be expected with such entities as cirrhosis of the liver, tuberculous peritonitis, nephrosis, or retroperitoneal malignant tumor. The inability to palpate a definite mass or cyst is certainly not uncommon with mesenteric cysts, but the non-

Fig. 1. — Main body of cyst after removal.

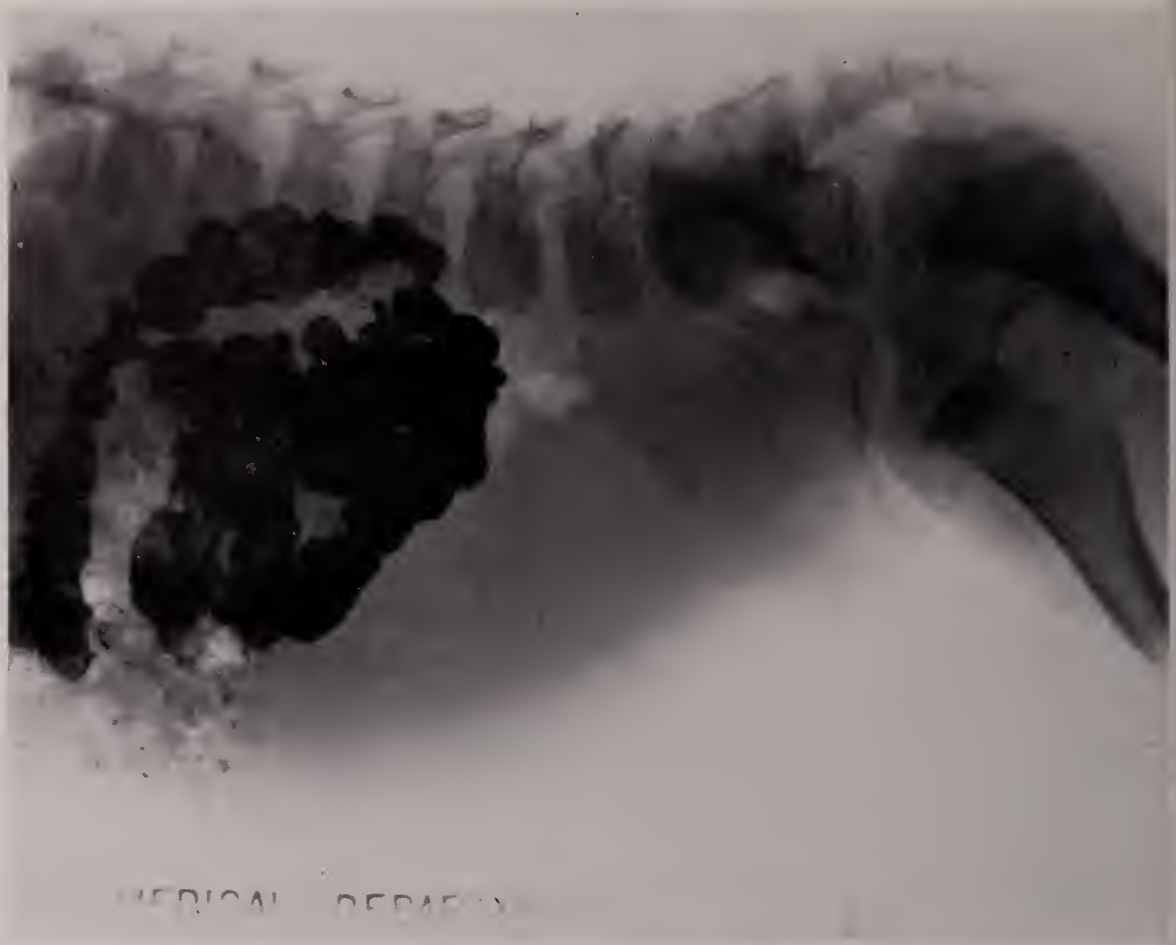

Fig. 2. — Upper gastrointestinal series showing displacement of barium-filled small intestine.

productive initial paracentesis might have aroused suspicion.

In addition, we would emphasize the aid of an upper gastrointestinal series, especially with the lateral film which demonstrates a localization of fluid and specific displacement of the abdominal content (fig. 2). We were unable to demonstrate a compressed anterior loop of bowel as described by Arnheim, Schneck, Norman and Dreizin.[1]

Reference

1. Arnheim, E. E.; Schneck, H.; Norman, A., and Dreizin, D H : Mesenteric Cysts in Infancy and Childhood, Pediatrics 24:469-476 (Sept.) 1959.

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Three color television presentations direct from Jackson Memorial Hospital, Miami, will be featured on Thursday and Friday, April 22-23, at the Association's Annual Meeting in the Americana Hotel, Miami Beach.

Clinical Use of Arterial Pulse Tracing Analysis

Change in Pulse Contour Following Surgical Correction of a Patent Ductus Arteriosus

ALVYN W. WHITE JR., M.D.
PENSACOLA

Analysis of the arterial pulse contour is often a useful adjunct in the clinical evaluation of the cardiovascular system. The recording of arterial pulse tracings without arterial puncture allows the satisfactory recording of the arterial pulse tracing as a routine part of the phonocardiogram. To illustrate the value of this method, a patient with a patent ductus arteriosus is presented with special reference to the preoperative and postoperative right carotid pulse tracings.

Report of Case

A 16 year old boy was first noted to have a cardiac murmur at the age of five years during a routine preschool physical examination. The diagnosis of patent ductus arteriosus was made clinically, and although surgical correction was advised, it was not accepted. He continued to be entirely asymptomatic and two months ago his parents requested re-evaluation of the murmur. Pertinent physical findings at that time included weight 98½ pounds, height 62 inches, blood pressure 120/68 mm. Hg, pulse rate 100, respirations 20, temperature 98.6 F. and a grade III machinery murmur with systolic accentuation heard throughout the precordium which was suggestive of a patent ductus arteriosus. Cardiac survey with fluoroscopy revealed the absence of cardiac enlargement, prominence of pulmonary bronchovascular markings in both inferior hilar areas and the presence of a definite hilar dance. Electrocardiogram and vectorcardiogram were consistent with diastolic overload of the left ventricle. A phonocardiogram confirmed the presence of a continuous murmur and was considered compatible with the diagnosis of patent ductus arteriosus (table 1 and fig. 1).

The patient was subsequently referred to the University of Florida where surgical ligation and division of a medium-sized patent ductus arteriosus was carried out without complications.

Approximately three weeks after the operation the chest x-ray revealed no definite change; however, fluoroscopy was not performed at this time. The electrocardiogram and vectorcardiogram showed resolving left ventricular diastolic overload and a phonocardiogram revealed the presence of an ejection type systolic murmur at the upper left sternal border which continued a short distance into diastole. The continuous murmur was no longer present. In spite of the minimal electrocardiographic changes noted at this time, comparison of the preoperative and postoperative phonocardiograms and right carotid indirect pulse tracings suggested that a considerable alteration in hemodynamics had occurred which was consistent with interruption of a moderate left to right aorticopulmonary shunt (table 1, figs. 1 and 2).

Arterial Pulse Contour Analysis

A model 62 Sanborn phonocardiograph equipped with a Sanborn Model 374 pneumatically coupled piezoelectric pulse wave attachment was used to record the phonocardiograms and indirect arterial pulse tracings.

The period of left ventricular systolic ejection was measured directly from the tracing and the LVSET index described by Weissler, Peeler and Roehll[1] was used to correct for differences in heart rate. The left ventricular isometric contraction time and the left ventricular tension period were determined by the method of Frank and Kinlaw.[2] The left ventricular isometric contraction time was expressed as the difference of the interval between the first and second heart sound and the left ventricular systolic ejection time. The left ventricular tension period was determined by calculating the difference of the interval between the Q wave of the electrocardiogram and the aortic component of the second heart sound and the left ventricular systolic ejection time.

The maximum slope of the pulse wave front was calculated as the mathematical product of the tangent of the angle from the horizontal of the most rapid rate of pressure rise of the ascending pulse and the speed of the record in millimeters per second.[3] Correction of this value for calibration of the pulse tracing is accomplished by multiplying by the ratio of the pulse pressure and the amplitude of the pulse tracing.[4] The average slope of the pulse wave front was expressed in terms of the ratio of the pulse pressure and upstroke time.[5] The upstroke delay was determined by subtracting the left ventricular systolic ejection time from the interval between the first heart sound and the incisura.

Since the monitoring site was the same before and after surgery, the pulse wave velocity was expressed as the reciprocal of the upstroke delay.

The integral of positive acceleration of the pulse wave front was expressed as the maximum

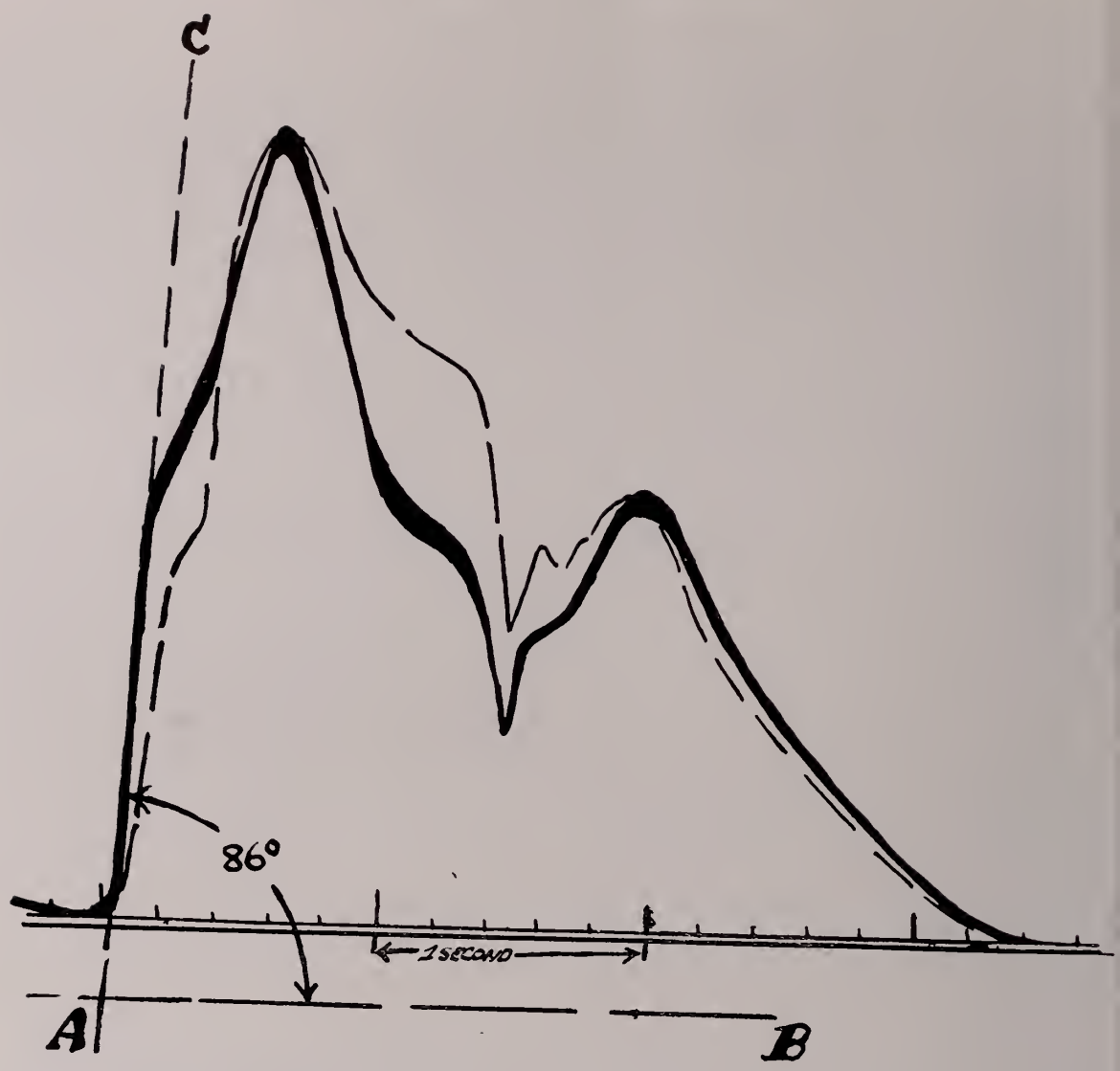

Fig. 1. — Right carotid pulse contour prior to surgery. Broken line forms outline of pulse contour after surgery. $<C'A'B = 86°$. Note that there is a faster rate of rise of the arterial pulse than in postoperative tracing and that after reaching peak deflection there is a more rapid fall in pulse deflection and a lower level of the incisura.

Table 1. — Mathematical Comparison of the Indirect Carotid Pulse Contour Before and After Surgical Correction of a Patent Ductus Arteriosus

Blood pressure	Before Surgery	After Surgery
Mean arterial pressure	120 68	120/80
Pulse pressure	94 mm. Hg	100 mm. Hg
Amplitude of pulse tracing	52 mm. Hg	40 mm. Hg
Upstroke time	37 mm.	37 mm.
Upstroke delay	0.11 sec.	0.11 sec.
LV isometric contraction time	0.04 sec.	0.04 sec.
LV tension period	0.02 sec.	0.04 sec.
LVSET index	0.06 sec.	0.10 sec.
Average slope	0.396 sec.	0.396 sec.
Corrected maximum slope	472 mm. Hg/sec.	361 mm. Hg/sec.
Integral of positive acceleration	1,600 mm. Hg/sec.	660 mm. Hg/sec.
	64.0	26.4

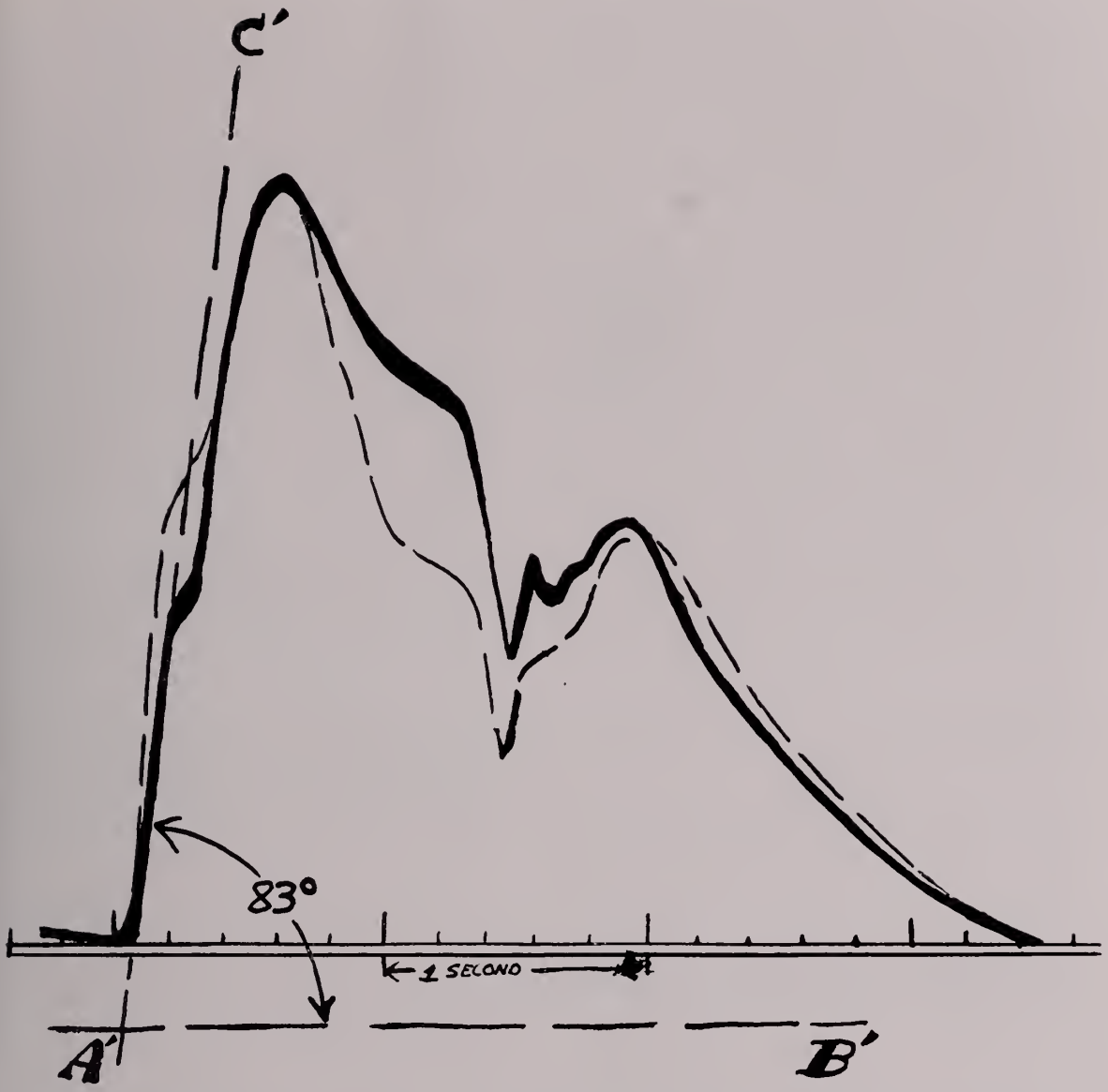

Fig. 2. — Right carotid pulse contour after surgery. Broken line outlines pulse contour before surgery. Note the decrease in the rate of pulse rise. $\angle C'A'B' = 83°$. After reaching peak deflection the fall is much slower and the incisura is at a higher level. Also note the more sustained plateau following peak deflection.

slope of the pulse wave front divided by the pulse wave velocity.[3]

Arterial blood pressure was determined by auscultatory method at the time of each study. The mean arterial pressure was expressed as the sum of the systolic and diastolic pressures divided by 2.

The results of these calculations for the preoperative and postoperative tracings are given in table 1.

Discussion

The relationship between the pulse contour and the velocity and acceleration aspects of blood ejected into the arterial system by cardiac contraction has been studied recently by several investigators[3-8] and it is now generally accepted that the force of cardiac contraction can be related to the pulse contour only if the peripheral resistance is also considered.

According to the theory of "The Higher Dynamic Functions of the Heart" proposed by Starr,[3] the maximum slope of the pulse wave front and the average slope of the pulse wave front are related to the product of the force of cardiac contraction and the peripheral resistance. Studies by Starr[4,5] have indicated that whereas these derivatives of the pulse contour rarely fall below two standard deviations of the mean (presumably be-

cause of an increase in peripheral resistance to offset myocardial weakness) they frequently are abnormally high in situations characterized by a low diastolic arterial pressure due to a rapid run-off of the aortic pressure head.

Due to the common association of a more rapid rate of ventricular contraction in hemodynamic situations characterized by rapid run-off of the aortic pressure head, the left ventricular isometric contraction time and tension period are usually shorter than normal.[9]

The integral of positive acceleration of the pulse wave front expressed as the ratio of the maximum slope of the pulse wave front to the pulse wave velocity is currently considered a reliable indication of peripheral resistance provided the force of cardiac systole remains constant.[10] The numerical value of this ratio is inversely proportional to the peripheral resistance.

The case reported in this article rather dramatically demonstrates the alterations of these parameters of cardiac function which mirror the change in hemodynamics resulting from the surgical interruption of the aorticopulmonary shunt.

Summary

The hemodynamic changes expected to occur following interruption of an aorticopulmonary shunt are revealed by a comparison of the indirect carotid pulse tracings obtained before and after surgical correction in a patient with a patent ductus arteriosus. This comparison shows a definite alteration of the parameters considered related to the mathematical product of the peripheral resistance and force of cardiac contraction.

References

1. Weissler, A. M.; Peeler, R. G., and Roehll, W. H. Jr.: Relationships Between Left Ventricular Ejection Time, Stroke Volume, and Heart Rate, Am. Heart J. 62:367, 1961.
2. Frank, M. N., and Kinlaw, W. B.: Indirect Measurements of Isovolumetric Contraction Time and Tension Period in Normal Subjects, Am. J Cardiol. 10:800-806 (Dec.) 1962.
3. Starr, I.: Studies Made by Simulating Systole at Necropsy: XI on the Higher Dynamic Functions of the Heart and Their Reflection in the Pulse Wave, Circulation 17:589, 1958.
4. Starr, I., and Ogawa, S.: A Clinical Study of the First Derivative of the Brachial Pulse. Normal Standards and Abnormalities Encountered in Heart Disease, Am. Heart J. 65:482-494 (Apr.) 1963.
5. Starr, I., and Ogawa, S.: Quantitative Studies on the "Quickness" of the Pulse. Am. J. M. Sc. 243:309-322 (Mar.) 1962.
6. Chelbus, H. K.: The Examination of the Carotid Pulse by Means of Resonance Electro-Sphygmography in Relation to Arterial Pressure Tracings, Am. Heart J. 64:22, 1963.
7. Lohr, H. A.; Van Hollenhoven, E., and Van Rotterdam, A.: Precordial Accelerography and Acceleration Ballistocardiography, Am. Heart J. 66:108, 1963
8. Boiteau, G. M.; Bourassa, M. G., and Allenstein, B. J.: Upstroke Time Ratio. A New Concept in Differentiating Valvular and Subvalvular Aortic Stenosis, Am. J. Cardiol. 11:319-326 (Mar.) 1963.
9. Sutton, G. C.; Hohf, R. P.; Gibney, J. P., and McEwen, E. E.: Alterations in Systolic Components of the Cardiac Cycle in Aortic and Pulmonic Valve Insufficiency in Human Beings and Experimental Animals, Am J. M. Sc. 243:323-329 (Mar.) 1962.
10. White, A. W., Jr., and Holmes, T. G.: Study of the Indirect Carotid Pulse Contour in Patients With Occlusive Disease of the Carotid Arterial System. Unpublished Data.

1750 North Palafox Street.

Chihuahuas and Asthma

KEENER TIPPINS, M.D.
PENSACOLA

Dramatic improvement of asthma is occasionally attributed by the public to close contact with Chihuahua dogs, but a search of the medical literature failed to reveal any information on this subject. It seemed worth while, therefore, to undertake an investigation of this matter. Veterinarians in Pensacola and several other Southern cities were contacted and asked for the names and addresses of Chihuahua owners. A letter of explanation and a questionnaire were then prepared and sent to each of the owners. The following, in an abbreviated fashion, are some of the questions asked:

1. Was the dog obtained because someone in the family had asthma or some other manifestation of allergy?
2. Age, sex, race, and occupation of person having asthma.
3. Do you feel the condition has improved or become worse since obtaining the dog? If so, how long after the dog was obtained?
4. How close is contact between patient and dog?
5. Did you have another animal which was discarded when the Chihuahua was obtained?
6. Did you move into a different house or to another area about the time the Chihuahua was obtained?
7. Was there a change of furniture, or living habits about the time the Chihuahua was obtained?

8. If a child, does (or did) he sleep with a stuffed toy?
9. What kind of pillow and mattress does the patient use? Has there been a change?
10. Please give any other comment.

This questionnaire was sent to 241 Chihuahua owners. Although several asthmatics known to me had supposedly been helped by Chihuahuas, these names were not added to the mailing list unless submitted by the veterinarians.

One hundred and thirteen questionnaires were returned. Of this number, 80 did not have asthma and had obtained the dog for a pet. Of the 33 who had asthma, 21 felt that the condition definitely improved after obtaining the dog, five said there was no improvement and, in seven cases, it could not be determined definitely by me that the patient felt he was helped. Were it not for leaning toward conservatism, these seven cases could be added to those in which the patients were helped. Of the five in whom no improvement occurred, one had hypertension and heart failure and died of cardiac asthma, one said that he was "seldom around the dog" and one had a long-haired dog.

The side comments were interesting. It was mentioned more than once that in order to be of help, the dog must be a thoroughbred, must be short-haired and must have close contact with the patient—preferably sleeping in the same bed.

Of the 21 cases in which benefit was thought to have occurred, the sex of the patients was about evenly divided as was the sex of the dogs. The ages of the patients, at the time the dogs were obtained, ranged from four and one-half months to 58 years. The time interval between obtaining the dog and noticeable improvement varied from immediately to "a few months." Ten patients slept with the dogs and all others indicated close contact. One disenchanted owner of a long-haired Chihuahua, who was not helped, said that he tried to sleep with the dog but that "it snapped at anything that moved—be it a toe or a nose." Two patients disposed of parakeets at the time the dogs were obtained.

In the case of a seven year old white male, the parents stated that not less than $5,000 had been spent in treating the asthma which the doctors described to the parents as "the worst case they had ever seen." There was marked improvement within two weeks after obtaining the dog. This, however, is one of the two cases in which a parakeet was disposed of at the time the dog was obtained.

Nothing of significance was found in the answers to the other questions asked but not discussed here.

Summary

One hundred and thirteen questionnaires were returned of a total of 241 sent to Chihuahua owners inquiring into the relationship of asthma and ownership of Chihuahuas.

Thirty-three persons had purchased the dog in hopes of improving asthma, and of this number 21 claimed definite improvement, seven were possibly improved, and five were not benefited.

Subjective improvement in almost two thirds of the asthmatic patients after close contact with Chihuahuas would seem to warrant further investigation into the reasons for this response.

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Jakob-Creutzfeldt Disease

Barkley Beidleman, M.D.
PENSACOLA

Following the original descriptions by Creutzfeldt[1] and Jakob,[2,3] of the syndrome which has come to bear their names, early attempts at its classification and delineation on clinical and/or pathological grounds only served to confuse the issue.[4-6] In more recent years, emphasis has been placed on a few consistent characteristic aspects as criteria for separating this syndrome clearly from other forms of presenile dementia.[7-9] Thus, the combination of ataxia, myoclonus and progressive dementia should suggest Jakob-Creutzfeldt disease as the diagnosis. When this triad occurs in a middle-aged patient with no history of a familial tendency towards this condition, in whom the spinal fluid examination shows no abnormalities, and who manifests a marked startle reaction, as described in the case report presented, the diagnosis is fairly well established. One can then expect progression in the mental changes to a state of complete unresponsiveness over a period of about eight weeks. Since there is absolutely no effective treatment, simple and practical plans for the nursing care of the victim can be arranged, avoiding further useless and expensive diagnostic endeavors and foredoomed therapeutic trials.

Report of Case

A 59 year old white married male farmer was first examined in February 1961, with complaints of abdominal discomfort and tightness across the anterior chest on exertion. Complete physical examination and a Master's two-step exercise tolerance test gave negative results.

He was next seen in the Department of Otolaryngology on June 14 with complaints of "grogginess," difficulty in maintaining balance, and nervousness. Physical examination at that time gave negative results except for definite nystagmus. Nicotinic acid, dimenhydrinate (Dramamine), and moderate salt restriction were prescribed with no benefit. During the next six weeks, additional complaints were blurred vision, nausea, sliding vertigo, and increasing ataxia. His family also noticed some change in personality and decrease in memory. He was seen in consultation in late July 1961 by Dr. Theodore L. L. Soniat, neurologist at the Ochsner Clinic, New Orleans, who described an ataxic gait, decomposition of movement in all extremities, horizontal and vertical nystagmus, slurred speech, and moderate diminution in vibratory perception in both great toes. Multiple laboratory and x-ray examinations gave only normal or negative results. Lumbar puncture revealed clear fluid with normal pressure and dynamics, a total cell count of one lymphocyte, total protein 39 mg. per hundred cubic centimeters, negative Kolmer's test and normal colloidal gold curve.

A pneumoencephalogram performed on July 31 showed no gross abnormality. A tentative diagnosis of subacute olivopontocerebellar degeneration was made, for which no treatment could be recommended. The patient very rapidly became more ataxic and confused with rambling speech and confabulation.

He was admitted to the Escambia General Hospital on August 24 for re-evaluation. Examination at that time was essentially unchanged except for a definite startle reaction which produced a stereotyped generalized myoclonic response, characterized by staring eyes, chewing motion of the jaws, jackknifing of the trunk, tonic flexion of the arms and legs, a prolonged expiratory grunt, and urinary incontinence. Lumbar puncture again revealed crystal clear fluid under no increase in pressure and with normal dynamics, a total white blood cell count of three lymphocytes, negative Pandy reaction, total protein 42 mg. per hundred cubic centimeters, chlorides 124 mEq. per liter and a normal colloidal gold cell curve.

An electroencephalogram (fig. 1) on October 3, approximately four months after the first symptoms and finding of nystagmus, was reported as follows by Dr. William M. C. Wilhoit: "Basic frequency undetermined. During the entire record very frequent, single, sharp, high voltage spiking waves were noted, usually in all areas, but during the bipolar runs activity appeared to be initiated in the right temporal lobe with immediate spread into all areas. Some muscle tension and movement artifact were noted. On several occasions there was a slight tendency toward multiple spiking waves."

The tracing compares very closely with previously published tracings in other cases of Jakob-Creutzfeldt disease.[9]

During the next two months, there was an inexorable progression of the symptoms and signs to a completely vegetative state. Because of the excellent nursing care he received at home, the patient lived in this condition until April 8, 1962.

The significant findings at autopsy were limited to the central nervous system. On external examination the brain appeared slightly decreased in size and the membranes were thickened and opaque with the opacity most marked in the region of the sagittal suture. The cerebrum, cerebellum and cord all appeared to be involved to the same degree and the cortex was dry, brownish gray and slightly wrinkled. The sulci were not appreciably deepened, but the gyri were narrowed. On section, the gray matter was reduced to a thin, brownish gray, slightly firm layer less than 0.3 cm. in total thickness, except at the base of each sulcus where the gray matter was slightly wider. The white matter was homogeneous, slightly increased in consistency and showed no areas of hemorrhage or necrosis. There was a uniform dilatation of the ventricular system which was filled with clear fluid. The choroid plexuses showed no abnormalities. This diminution and increased consistency of the gray matter were present in all areas of the brain examined.

Microscopic examination revealed a diffuse generalized increase in the nuclear content of the molecular layer, the external granular layer and the pyramidal layer of the cortex (figs. 2 and 3). The tissues had a fibrillary pattern with prominent, large sudanophilic astrocytic cells (figs. 4 and 5). The pyramidal layer showed a marked decrease to total absence of ganglion cells and those cells still present showed marked degenerative changes. No abnormalities in the blood vessels and no evidence of perivascular cellular infiltrations were noted. Senile plaques were absent.

This combination of extensive loss of neurons in a symmetrical distribution throughout the entire cerebral and cerebellar cortex, an absence of vascular abnormalities and senile plaques and the

From the Section of Internal Medicine of the General Escambia hospital, Pensacola.

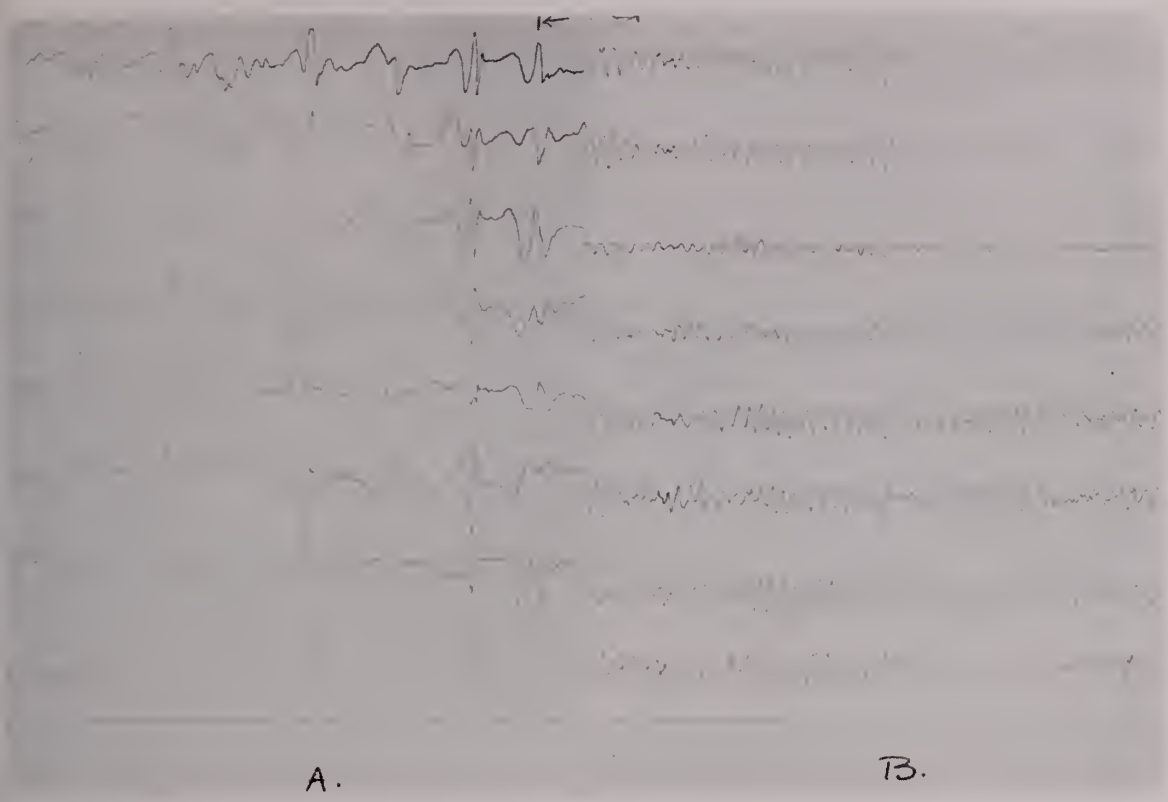

Fig. 1. — (A-patient, B-normal) Monopolar electroencephalographic tracings illustrating the pattern on left highly suggestive of Jakob-Creutzfeldt disease.

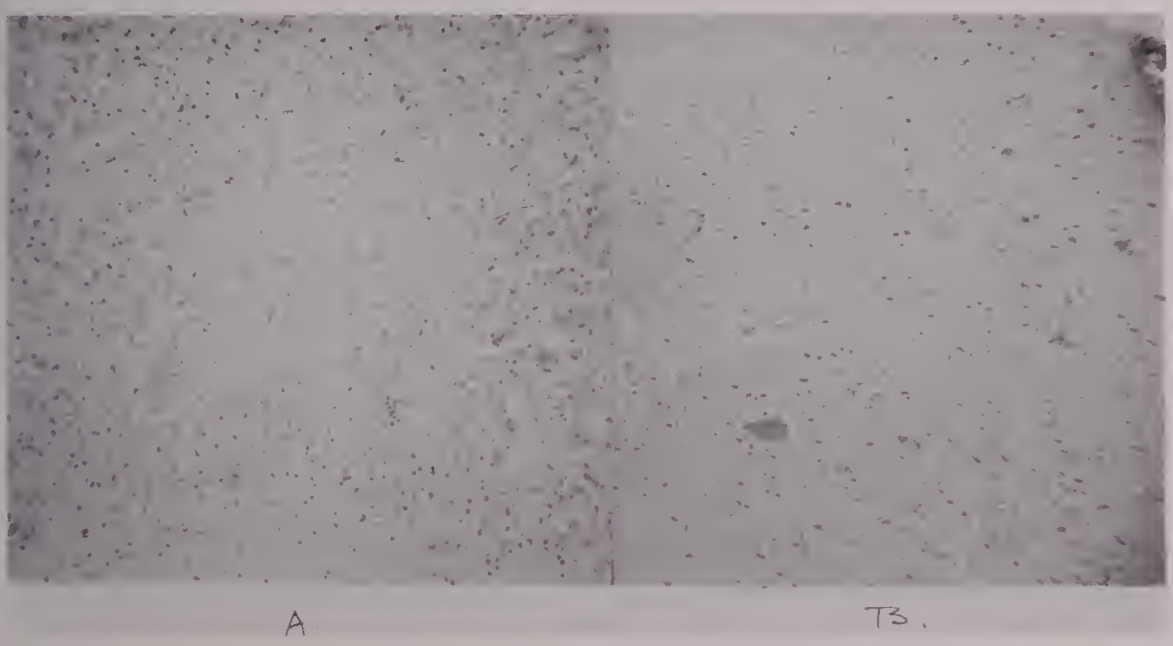

Fig. 2. — (A-patient, B-normal) Low power view of cerebral cortex. The increased cellularity in A is due to astrocytic proliferation.

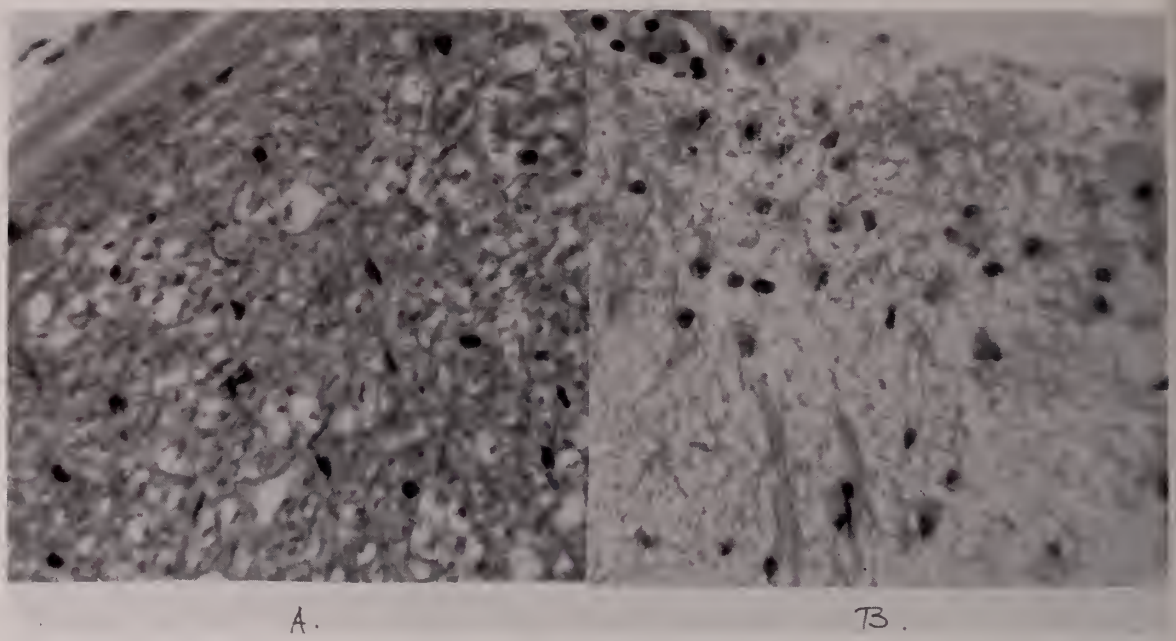

Fig. 3. — (A-patient, B-normal) High power magnification of outer zone of cerebral cortex. The degree of glial proliferation noted here was seen in all areas examined, cerebellar as well as cerebral.

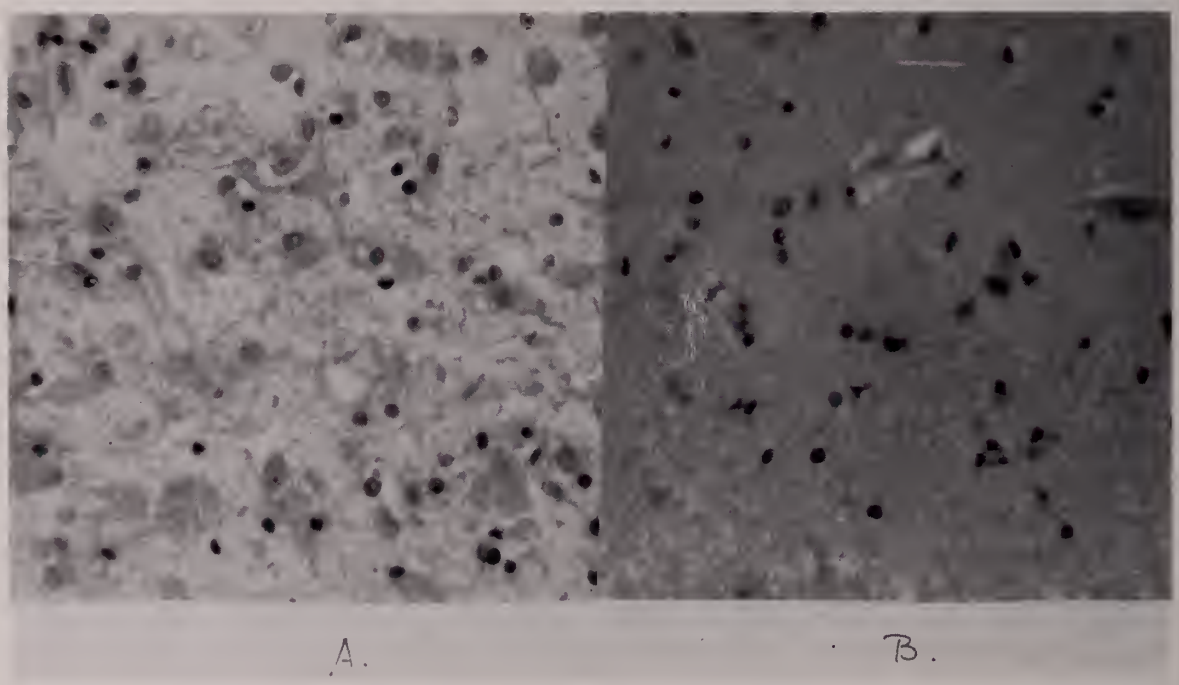

Fig. 4. — (A-patient, B-normal) High power magnification of pyramidal zones. Note the distended sudanophilic nerve cells in the diseased specimen.

clinical history as given are encountered only in Jakob-Creutzfeldt disease.

Summary and Conclusions

A marked startle reaction developing in a middle-aged patient with rapidly progressive ataxia, myoclonus and dementia should bring to mind Jakob-Creutzfeldt disease as the probable diagnosis. If there is no familial tendency toward this condition, the spinal fluid is normal and the electroencephalogram confirmatory, the prognosis is limited, no treatment is indicated and arrangements for adequate nursing care should be made.

Dr. Gretchen V. Squires provided the pathologic description and the photomicrographs, and Dr. Howard Herring gave permission to report the case.

References

1. Creutzfeld, H. G.: Ueber eine eigenartige herdformige Erkranking des Zentralnervensystems, Zeit. f.d. ges. Neur. u. Psych., 57:1-19, 1920.
2. Jacob, A.: Ueber eigenartige Erkrankungen des Zentralnervensystems mit hemerkenswerten anatomischen Befunde, Spastische Pseudosklerose-Encephalomyelopathie mit disseminierte Degenerationsherden. Ibid ; 1921, 64, 146228.
3. Jacob, A.: Spastische Pseudosklerose; Die Extrapyramidalen Erkrankugen, Berlin, 215-245, 1923.
4. Davison, C.: Spastic Pseudosclerosis (Cortico-Pallido-Spinal Degeneration), Brain 55:247-264 (June) 1932.
5. McMenemey, W. H.: A Critical Review: Dementia in Middle Age, J. Neurol. & Psychiat. 4:48-79 (Jan.) 1941.

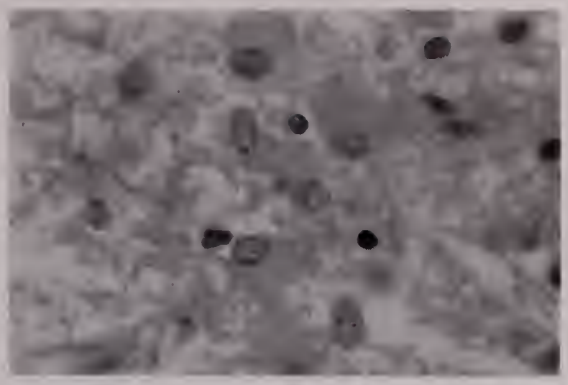

Fig. 5. — Oil immersion magnification of swollen sudanophilic nerve cells in pyramidal layer of diseased specimen.

6. Bornstein, S., and Jervis, G. A.: Presenile Dementia of the Jakob type; Corticostriospinal Degeneration, A. M. A. Arch. Neurol. & Psychiat. 74:598-610 (Dec.) 1955.
7. Fisher, C. M.: The Clinical Picture in Creutzfeldt-Jakob Disease, Trans. Amer. Neurol. 85:147-150, 1960.
8. Nevin, S : McMenemey, W. H.; Behrman, S., and Jones, D. P.: Subacute Spongiform Encephalopathy—A Subacute Form of Encephalopathy Attributable to Vascular Dysfunction (Spongiform Cerebral Atrophy), Brain 83:519-564 (Dec.) 1960.
9. Victor, M : Case Records of the Massachusetts General Hospital, Case 46-1961, New England J. Med. 264:1359-1364, 1961.
10. Abbott, J.: The EEG in Jakob-Creutzfeldt's Disease, EEG Clin. Neurophysiol. 11:184-185, 1959.

1750 North Palafox Street.

The Anterior Urethrovesical Suspension in Certain Cases of Retention of Urine in the Female

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PENSACOLA

The anterior urethrovesical suspension (Marshall-Marchetti) operation,[1-7] a simple direct technique designed to correct existing pathology, was originally conceived to control stress incontinence in the female. It also has other areas of usefulness in those basic problems where stress incontinence may, in reality, be only one of the many existing symptoms. This aptly applies to the prolapse or herniation of the bladder and urethra into the vagina (cystourethrocele)[8] which is the result of the loss of the pubocervical vaginal connective tissue and urethropubic, cervicopubic and vesicopubic ligaments.[9-11] This condition is thought to be most commonly due to parturition, but that is not invariably a prerequisite. Dehiscence of this tissue can spontaneously occur.[12] The stress type of incontinence[13-15] is a symptom of some basic pathology, such as prolapse of the bladder and urethra[16] (cystocele and urethrocele), rather than an entity in itself. Anterior and posterior anatomic types of cystocele are described along with the clinical considerations and necessary diagnostic procedures.[11] Novak[9] called this the relaxed vaginal outlet syndrome. The involved pelvic anatomy is well documented and need not be reviewed.[17-19]

The symptomatology runs the gamut from incontinence to urinary retention with a host of associated symptoms. These may result from frequent attacks of cystitis due to irritation and small amounts of residual urine, with frequency, burning and pain.[9-11] No definite permanent

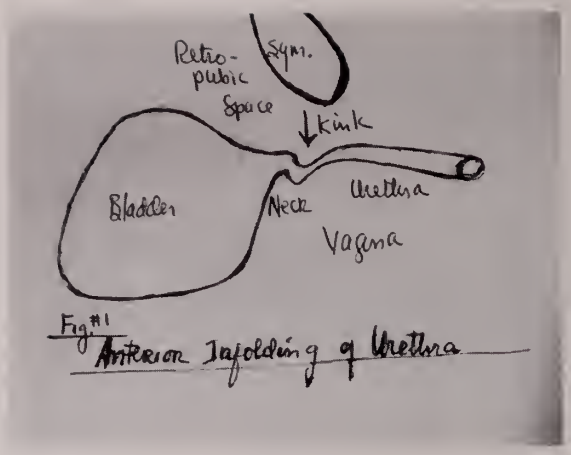

Figure 1

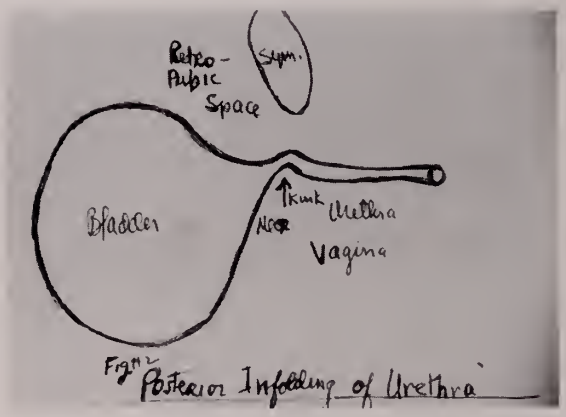

Figure 2

urethral inflammation, however, acute or chronic, was observed in a study of urethral histology on urethras of human cadavers ranging in age from two to 84 years.[20] The female bladder is usually slightly lower in the pelvis than the male bladder.[19] Irritation of the female bladder, particularly the trigone, from such causes as intercourse, walking or even sitting, takes place with the bladder in the abnormally low position present in herniation into the vagina. Frequency and urgency may exist independently of an infection or neurogenic entity merely as a result of the urethral prolapse and small amounts of urine which escape periodically on stress. Suprapubic distress, a falling out feeling in the vagina with a bearing down sensation and low backache are described by patients. It is not uncommon for patients to state that manual replacement of the bladder vaginally is necessary before they can void. Careful urological evaluation, therefore, must be made to determine whether the cause of the symptoms is mechanical, neurogenic or infectious.

Urinary retention[21] occurring as a result of existing prolapse of the bladder and urethra (cystourethrocele) was first corrected by the anterior urethrovesical suspension (Marshall-Marchetti)[1] operation by Weyrauch and Melody.[16] The pathology and cystoscopic appearance of the urethral lesion were also described by them. It is now possible to add three additional cases in which retention due to prolapse of the bladder and urethra was controlled in each by the anterior vesicourethral suspension.

In two of the cases the condition was due to the anterior infolding (fig. 1) of the urethral wall as Weyrauch and Melody[16] described. In the other case it resulted from a kinking on the posterior urethral wall (fig. 2) over a band of scar tissue resulting from a previous colporrhaphy. Each of the three patients in question had had a hysterectomy (two vaginal, one abdominal) and anterior repairs.

These cases were carefully selected for operation after complete urological evaluation. This included the usual history and complete physical examination, and cystoscopy, simple cystometric examination, pyelography and cystograms when needed. Measurement of the urethral length in both the supine and erect positions according to Lapides[15,25] was not done in these cases. Only catheterized urines were examined. Residual urine was measured immediately by postmicturitional catheterization. The pelvic examination was made in the recumbent and erect positions as were the incontinence tests. The findings were usually more marked in the erect position, as was the retention of urine in these three cases.

The technique of the operation has been adequately described by Marshall and Marchetti[1] and Weyrauch and Melody.[16] The only variation added was a row of sutures into the vaginal wall and endopelvic fascia from the urethra laterally along the superior surface of the inferior rami of the pubis. Chromic No. 1 sutures on a cutting needle were used for this purpose. The other sutures were chromic No. 1 on a round needle. A No. 20 French 5 cc. Foley catheter was in place preoperatively and left indwelling until the seventh postoperative day. On its removal, the patient was allowed three spontaneous voidings. Immediately after the third voiding, the residual urine was measured by catheterization. If it exceeded 90 cc., the catheter was replaced for three more days and the same procedure was again carried out. Patients were sent home with indwelling catheters if they were unable to void

completely by this time as a result of weak detrusor muscles which can occur in long-standing retention. All three patients ultimately had a successful result.

Report of Cases

Case 1. — A 40 year old white para III, gravida III, had a 10 year history of constant urinary leakage and wetting the bed. It was necessary to push the bladder back manually into the vaginal cavity so that voluntary urination could occur. This condition developed almost immediately following an abdominal hysterectomy and anterior repair. The patient had constantly worn a pad. There was a constant desire to urinate hourly during the day and four to five times at night. Two renal calculi had been passed. She was a robust woman. A suprapubic scar was present; there were no abdominal masses nor tenderness. The external genitalia were normal and the internal were absent. Bladder and urethral protrusion was present from the vulva in the lithotomy position and urine leaked away from her on any movement. Both were worse in the erect position. A catheterized urine specimen showed an occasional white blood cell and a trace of sugar. Cystoscopy demonstrated a large, deep bas-fond extending far into the vaginal cavity, an oval urethra and considerable tissue laxness beneath the symphysis. The bladder mucosa and trigone were normal. Kinking of the anterior urethral wall just outside the vesical neck was visually demonstrated. Intravenous pyelograms were normal. A cystometric study showed all bladder modalities and nervous pathways to be intact. The capacity was 400 cc. Good muscular and voiding contractions were present; overflow incontinence was severe and the residual urine was 310 cc. When she manually replaced the bladder into the vagina, complete emptying occurred.

A diagnosis of prolapsed bladder and urethra with overflow incontinence was made. An anterior vesicourethral suspension was performed on June 26, 1963. The catheter was removed on the seventh postoperative day; she voided normally, completely emptying the bladder, without incontinence in any position from then on. The only complication was a mild osteitis pubis which cleared spontaneously in about 12 days. On Jan. 3, 1964, she was symptom-free, without any prolapse of the bladder and urethra, voiding normally. She has been most satisfied with the results.

Case 2. — A 67 year old white woman, a severe diabetic, has had bladder difficulties since 1955, consisting of the inability to urinate associated with severe pain and straining both day and night. Small amounts of urine could be expelled at a time. The symptoms were more severe when sitting or standing. Several urological evaluations were made over the years. Many types of instrumentative, dilatative and instillative treatments were accomplished. Pyelograms were always normal. Parasympathomimetic drugs, narcotics and antibiotics were administered. At times, the urine would become infected. The diabetes was kept under control. Bleeding spots were observed in the bladder resembling Hunner's ulcer. In retrospect, they should have been considered an overdistention phenomenon. She was never free from symptoms. Her internist agreed that surgical treatment was not impossible after an anterior type prolapse obstruction was recognized. There was marked herniation of the bladder and urethra into the vagina, much worse in the upright position. Cystometric studies always showed a normal bladder with a weak detrusor muscle as in prostatism. A 460 cc. bladder capacity with a 140 cc. residual urine was observed. A diabetic neurogenic bladder was considered, but could not be established conclusively by cystometric studies. Incontinence was not a problem.

On July 7, 1962, an anterior urethrovesical suspension was performed with complete correction of the bladder prolapse and herniation. She could not void postoperatively and required an additional period of catheter drainage. Cystometric examinations again gave normal results except for a weak detrusor muscle which gradually recovered and returned to normal while she was on catheter drainage. On the third try off the catheter, she voided well, emptied the bladder completely and finally became pain-free. Instead of seeing this patient many times a year, months go by without even a check-up visit. Several years previous to this operation, she had had a vaginal hysterectomy.

Case 3. — A 39 year old white para III, gravida III, after undergoing vaginal hysterectomy and cystocele repair, was seen in consultation on Oct. 11, 1963, because of urinary retention. She had been hospitalized with Meniere's disease, having headaches and dizziness. The urinary retention followed two months of gradually increasing voiding difficulty. An intraspinal cervical disk was present, but did not cause the retention. A cystometric examination on two separate occasions demonstrated a normal neurological bladder with a mechanical obstruction. A cystoscopic examination showed a relaxed urethra hanging over a ridge of scar tissue with a posterior urethral infolding. On straining, the urethral angulation was more pronounced. There was a deep bas-fond behind the vesical neck. Retrograde pyelograms were normal. A pelvic examination with the patient in the erect position demonstrated the herniation of the bladder and urethra into the vagina.

The anterior urethrovesical suspension was performed on October 25. The hospital course was uneventful and she was discharged on November 2 with an indwelling catheter because of residual urine in excess of 90 cc. She was seen in the office on November 4. The catheter was left out after another normal cystometric examination and complete emptying of the bladder. She was rechecked on the following day and was voiding normally. The cervical disk has since been removed without bladder involvement. The cystometric examination and cystoscopy were correctly relied upon in this case. The result has been most gratifying.

Conclusion

The traditional term cystourethrocele could be changed to a more descriptive terminology, either hernia of the bladder and urethra into the vagina or prolapse of the bladder and urethra. The pathology of the entity is cited and its symptomatology briefly reviewed. The diagnostic difficulties encountered in separating the mechanical from the infectious and neurogenic etiology of the identical symptoms are emphasized. Retention of urine occurs in certain of these cases by reason of the sudden infolding and angulation of the tubular urethra on the lesser concave surface. This principle is well understood in engineering where a circular tube is to be bent. Special tools must be used to prevent such kinking and obstruction to the lumen. This concavity may be either anterior or posterior. The technique of the anterior suprapubic urethrovesical suspension operation with minor variations and the postoperative management are also briefly reviewed. Three cases are presented which demonstrate the thesis.

References are available from the author upon request.

1801 North "E" Street.

The Broader Treatment of Acute Alcoholism and Delirium Tremens

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The treatment described had its beginning because of marked frustrations and problems in the handling of private and indigent alcoholic patients. During my medical internship at Bellevue Hospital in New York City, about four weeks part time were served on the alcoholic ward. Alcoholism was seen in patients who would arrive in various stages of intoxication, usually severely and acutely inebriated. The fastest procedure to sober the patient and to get him out of the hospital was devised: an enema or a strong laxative, intravenous or intramuscular stimulants such as pentylenetetrazol (Metrazol), nikethamide (Coramine), or caffeine, parenteral vitamin B complex, and forced fluids and nourishment. Usually the patient was sobered and discharged within a period of 24 to 48, and very rarely, 72 hours, but was frequently readmitted to the hospital within a few days. Unfortunately, the physician had only partially performed his task. Greater physical well-being, improvement of attitudes, study of motivations, and, in general, a broader approach to the problem had been slighted or neglected.

During my service as a general medical officer, this therapy was used and seemed effective with the physically healthy serviceman who was not an alcoholic, but who had been on an infrequent "drunk." The method, however, fell short in the more classical alcoholic.

On entering private practice as a specialist in neurology and psychiatry in Pensacola, I was called on to handle problems which many times were not of my choosing. Admission or treatment was rarely refused to a patient who was acutely alcoholic or was experiencing delirium tremens. At times, a lack of hospital facility or the fact that the same patient had interrupted previous treatment with elopement or signed a release against medical advice would lead to refusal of therapy without a legal detention order.

Method of Treatment

Because this method was not effective in long term therapy and with the advent of reserpine (Serpasil), chlorpromazine (Thorazine) and meprobamate, the following routine has been developed during the past 12½ years of private practice of neurology and psychiatry. A person who gives a history of drinking constantly for a period of one to two weeks of approximately a fifth or more of bourbon, scotch, or gin is usually considered in some stage of alcoholic intoxication. If he gives a long history of recurring episodes of such intoxication with or without a history of delirium tremens as he recovers from a drinking spree, he is considered a potential candidate for delirium tremens. Such a state usually begins 48 to 72 hours after alcohol is discontinued. Many times, patients of this type are seen in consultation for a surgeon or orthopedist about the third day following hospitalization or surgery and are found to be disoriented, confused, hallucinated, fearful, boisterous, or agitated. Commonly, the history obtained is that of a person who has had a daily intake of alcohol or tranquilizers in larger than the usual dosage without gross decompensation over a period of months or years. The acute delirioid state has usually been precipitated by the withdrawal from the intoxicant plus other factors, such as narcotics, sedatives, fever, or change in fluid balance.

The patient is given reserpine, 2.5 mg. intramuscularly, to be repeated in six or eight hours if the blood pressure maintains a level of 115 mm. Hg systolic or above and if he continues to be restless and agitated. He is also given promazine hydrochloride, 50 to 75 mg. intramuscularly or by mouth every four hours, and Rydiamin, 2 cc. intramuscularly daily. Each 2 cc. of Rydiamin contains the following: 100 mg. of thiamine, 100 mg. of pyridoxine, and 100 mg. of dl-methionine. After the nausea subsides, the Rydiamin is discontinued and Kremplex-B is used intramuscularly, each cubic centimeter containing 100 mg. of thiamine, 50 mg. of niacin, 5 mg. of riboflavin, 2 mg. of pyridoxine, and 5 mg. of d-Panthenol. Usually, this intramuscular vitamin therapy is kept up for two to three days and then changed to an oral preparation such as Mi-Cebrin T or Beminal Forte with Vitamin C twice daily. The one conspicuous omission from more orthodox treatment is the minimal use of sedation. If necessary, chloral hydrate, 0.065 to 0.01 Gm., is used,

but barbiturates are avoided as they seem to prolong the actual recovery from the intoxication and barbiturate intoxication is more difficult to treat than alcohol intoxication. Because less painful parenterally, promazine hydrochloride is used initially instead of chlorpromazine. When medication can be given orally promazine hydrochloride may be switched to chlorpromazine. For mild sedation, he may be given deserpidine and pentobarbital calcium (Harmonyl-N), full strength, and later half strength tablets, one every four hours if necessary for nervousness or rapid heart. Chlordiazepoxide hydrochloride (Librium), 25 mg. three to four times daily, or meprobamate, 400 mg. about four times daily, is also used on occasion.

Beginning with admission, one of the most important steps taken is the prophylactic use of diphenylhydantoin sodium (Dilantin Sodium), 200 mg. by mouth every six to eight hours for three to six doses, and then it may be decreased to 100 to 200 mg. daily for a period of four to five days. If the patient is unable to take oral preparations, he is usually given 250 mg. of diphenylhydantoin sodium intramuscularly, on one and possibly two occasions, then switched over to the oral preparation.

On this regimen, patients rarely, if ever, have any convulsive seizures. They tend to have a much easier and quicker recovery from the acute alcoholism. If they go into an acute delirioid state, it is of much shorter duration. The usual medical supportive measures such as antispasmodics, antinauseants, and antacids are ordered as indicated. These are usually used in the form of Combid Spansules, one every eight to 12 hours, Kolantyl Wafers, two or three between meals and at bedtime, or other similar preparations.

Patients are encouraged to remain in the hospital for seven to eight days, despite the fact that they are over the acute intoxication usually within 48 to 72 hours. If delirium tremens develops, they can be treated more appropriately. Furthermore, there is marked improvement in sense of well-being, sleep pattern, appetite and motivation, beginning about the fourth to the seventh day. Disulferam (Antabuse) may be instituted. A casual but friendly daily visit with the patient occurs on the usual morning rounds. Rapport between patient and physician is steadily improved. The physician's attitude is one of understanding and sympathy, but with a realistic appraisal of the patient's problem. Later, brief fortnightly visits as an outpatient are encouraged.

Results

With this routine, patients who are motivated for help do extremely well. Those who are not so motivated may insist on early release against medical advice or fail to keep subsequent follow-up appointments. If the patient is discharged against medical advice, it is clearly understood that the physician will not treat him again without a detention order. In this way the poorly motivated patients who really want only temporary relief when in the dire straits of alcoholism are eliminated. This setting of limits makes the physician feel that he is rendering a service to the alcoholic that is more likely to obtain the desired ends.

1750 North Palafox Street.

Appreciation

Dr. John M. Packard of Pensacola has served as guest editor for this issue of The Journal featuring the Escambia County Medical Society. To him, and to those physicians who have contributed articles or editorials, we extend our sincere appreciation. We have enjoyed the association, and we hope the Society will find the issue a source of pride.

Thad Moseley, M.D., Editor

The Use of Acetohexamide in the Treatment of Diabetes Mellitus

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Robert C. Palmer Jr., M.D.
and Barkley Beidleman, M.D.
PENSACOLA

Acetohexamide (Dymelor) is a new oral hypoglycemic drug that has recently become available and is recommended for the treatment of patients with maturity onset, nonketotic diabetes mellitus who can not be controlled by diet alone. This agent is related in structure to tolbutamide and chlorpropamide, with a time activity falling between the two. Acetohexamide has been found to possess potent hypoglycemic activity and is apparently free of frequent or severe toxic effects.[1] We report here the results of our experience in the use of this drug during the past two years.

Procedure

Thirty-one indigent adult patients attending the Escambia County Diabetic Clinic received a trial of therapy with acetohexamide. Eight of these patients are not included in the analysis of results because they were either uncooperative in taking the medication or because similar reasons precluded evaluation of the effectiveness of the drug. The patients, six men and 17 women, with a mean age of slightly over 54 years, exhibited features of maturity onset diabetes mellitus of the nonketotic type. The average duration of diabetes was a little over five years.

The patients were evaluated at intervals of from one to four weeks. Fasting blood sugar levels were measured at each visit in an auto-analyzer (ferricyanide method). Special emphasis was placed upon evaluating the symptoms and complications of diabetes mellitus and drug intolerance. The majority of the patients were considered to be obese and all were encouraged to follow their prescribed dietary regimen. Most of the patients had been followed previously while on therapy with other hypoglycemic drugs or insulin.

Acetohexamide was administered in a single oral dose with breakfast or in divided doses taken at mealtimes. Bedtime feedings were advised. The initial dose of acetohexamide was usually 250 mg. to 750 mg. per day. This was increased as needed until the level of the fasting blood sugar was in the range of 120 mg. per hundred cubic centimeters or until it became apparent that control of the diabetic state would not be effective with the use of acetohexamide. No attempt was made to have the level of the fasting blood sugar remain below 110 mg. per hundred cubic centimeters for fear of precipitating hypoglycemic episodes. Furthermore, many of the patients were also suffering from serious consequences of vascular disease and some were unable to recognize symptoms of hypoglycemia.

Each patient was followed for intervals lasting from six to 24 months. The average duration of acetohexamide therapy was 13.9 months. Patients who were classified in a fair, good or excellent category received acetohexamide in dosages ranging from 250 mg. to 2,000 mg. per day, with an average dosage of 1,200 mg. per day.

Results

The results of management of hyperglycemia were classified according to the majority of the fasting blood sugar levels while adequate drug therapy was given, as noted in table 1.

Table 1

Group	Fasting Blood Sugar (mg. %)
Excellent	120 or less
Good	121 to 150
Fair	151 to 200
Failure	201 or over

Patients were not classified in any of the excellent, good or fair groups if they continued to exhibit signs or symptoms, of uncontrolled diabetes mellitus. For analysis, the patients were subdivided into four groups based on therapy prior to the administration of acetohexamide.[2] Classification and response of the 23 patients evaluated are given in table 2.

Table 2

Group	Previous Therapy	Control Using Acetohexamide				No. of Patients
		Excellent	Good	Fair	Failure	
I	Unsuccessful diet restriction	0	1	1	5	7
II	Sulfonylureas	4	4	3	1	12
III	Phenformin	1	0	1	0	2
IV	Insulin	1	0	1	0	2
	Total	6	5	6	6	23

Of the five patients in Group I in whom control with acetohexamide was considered to be a failure, four subsequently required insulin therapy for regulation of the hyperglycemia. In only one patient was it possible to maintain control of diabetes on other oral therapy, although this was attempted with all of this group.

The patients who had previously been on other sulfonylurea therapy (Group II) were maintained with essentially the same degree of control while taking acetohexamide with the exception of one patient who was much better controlled with acetohexamide than she had been with other oral therapy. One of the fair control patients in this group later achieved good control while taking phenformin.

The two patients in Group III who had received phenformin prior to this study were maintained with essentially the same degree of control while acetohexamide was given.

One of the patients in Group IV who required 30 to 40 units of NPH insulin daily in order to maintain the fasting blood sugar level around 200 mg. per hundred cubic centimeters had had a previously unsuccessful trial with another sulfonylurea. A dose of 2,000 mg. of acetohexamide daily was required to keep her in the excellent-to-good category. She was subsequently regulated equally as well taking phenformin. The other patient in Group IV who had been poorly regulated on 20 units of insulin daily and who was in the fair category while taking another sulfonylurea, was easily controlled with a low dosage of acetohexamide.

Discussion

Acetohexamide was very well tolerated by the patients in this study. Only an occasional patient complained of nausea even when doses above 1,500 mg. per day were given. Our experience indicates that no significant increase in hypoglycemic effect seemed to result from dosages exceeding 1,500 mg. per day and therefore they do not appear to be necessary or desirable. The duration of effectiveness of acetohexamide in gradually and continually lowering the blood sugar curve has been shown to be over eight hours.[3] Administration of the total dose of the drug once a day in doses up to 1,000 mg. seemed to be as effective as the use of divided doses. We did not attempt to give single daily doses of over 1,000 mg. Tests of hepatic function and other "routine" studies were not performed while acetohexamide was given. Patients were observed carefully, however, for signs of toxicity and none were noted. Tests of hepatic function by others performed during acetohexamide therapy have thus far demonstrated a lack of toxic effects.[4,5] No skin manifestations of toxicity or idiosyncrasy appeared in this small group of patients. No serious hypoglycemic reactions were encountered partially because of our diligence in preventing them by using low dosages. The previously reported absence of severe hypoglycemia indicates acetohexamide is less cumulative than chlorpropamide.[5]

Acetohexamide appeared to be as potent a hypoglycemic agent for the control of the stable adult diabetic patient as any of the other sulfonylureas which are currently available. No patient who was refractory to acetohexamide was subsequently better regulated by any of the other available sulfonylurea agents. A combined therapy of acetohexamide plus plenformin has been tried occasionally by us and the results appear to be promising.

The primary hypoglycemic response to acetohexamide, that is, within a month, was invariably maintained in subsequent periods. No example of a "secondary" failure was noted. This lack of frequent "secondary" failure with acetohexamide has also been noted by Lozano - Costaneda, Camerini-Davalos, Kroll and Marble[4] in patients who were followed for periods up to more than two years.

Summary

Clinical trials with the use of acetohexamide were conducted in 23 stable diabetic patients for periods of six to 24 months. The average duration of treatment was nearly 14 months. Satis-

factory control of the diabetic state was accomplished in about half of the group. Nearly all patients not responding to treatment with acetohexamide subsequently required treatment with insulin. Acetohexamide was well tolerated, effective and seemed to be free of serious toxicity and side effects.

We wish to acknowledge the assistance of Henry Yonge, M.D., and Charles Kahn, M.D., in management of these patients.

We are indebted to Mrs. Bess Gauthier, R.N., for her capable management of the Escambia County Diabetic Clinic.

References

1. Maha, G. E.; Kirtley, W. R.; Root, M. A., and Anderson, R. C.: Acetohexamide. Preliminary Report on a New Oral Hypoglycemic Agent, Diabetes 11:83-90 (March-April) 1962.
2. Radding, R. S.; McHenry, J. I.; Purdie, C. B., and Robins, O : The Use of Acetohexamide in Stable Diabetes Mellitus, Metabolism 12:311-318 (April) 1963.
3. Weller, C.; Donesa, A., and Linder, M.: Evaluation of Duration of Action and Clinical Effectiveness of Acetohexamide, Metabolism 11:551-555 (June) 1962.
4. Lozano-Costaneda, O.; Camerini-Davalos, R. S.; Kroll, L. P., and Marble, A.: Two Years' Experience With Acetohexamide, Metabolism 13:99-106 (Feb.), 1964.
5. Dobson, H. L.: The Use of Acetohexamide in the Treatment of Diabetes Mellitus, Metabolism 11:1282-1286 (Dec.) 1962.

14 West Jordan Street (Dr. Prevatt).
1750 North Palafox Street.
(Drs. Palmer and Beidleman).

The Pensacola Educational Program
An Experimental Community Approach

The Pensacola Educational Program is a new departure in the field of graduate medical education. Its structure is experimental and its final justification can be determined only after a suitable period of operation. New concepts are developed in response to new needs or in recognition that old formulations have failed to meet objectives. It is apparent to all who are familiar with the problems of graduate medical education that a period of exploration and redefinition is here.

The Pensacola Educational Program is one attempt to meet what we believe to be the changing needs in the graduate educational area. Its structure has been based upon three premises which give meaning and direction to the program. The first premise states that the well staffed, well equipped community hospital can make a significant and meaningful contribution to graduate and postgraduate medical education. Secondly, our concepts suggest that effective unification of the total available medical facilities in a community can more effectively meet educational needs. The third premise around which our program has been structured is the belief that specific educational goals should be established and that the content of the curricula should be directed toward the attainment of these objectives.

Our house officers, then, come to a community and not to a single institution for their graduate training. They have been enthusiastic about the unified concept and have been eager to suggest and to innovate. Their suggestions are frequently incorporated into the educational goals, thus adding the dynamics of direct student participation to the effectiveness of the teaching effort. Their evaluation of the various services strongly suggests that what has been done thus far does indeed meet the educational needs which they have.

The Pensacola Educational Program tests the thesis that a community hospital or group of community hospitals remote from a medical center can offer a graduate medical experience which not only attracts the young physician, but which meets his developmental need. It is an experiment which tests the ability of an entire medical community to mobilize its resources for such an effort. It is a test of maturity for both the institutions involved and their staffs and in the final evaluation it will determine whether it is possible to find common purposes which are of sufficient merit to warrant the sacrifice of their individual prerogatives.

Kenneth E. McIntyre, M.D.
Director of Education and Research
Pensacola Educational Program

Editorials

The Ubiquitous Urinalysis

The so-called "routine urinalysis" is treated in the hospital or clinic laboratory with the same respect as that usually accorded the illegitimate child at the reading of his wealthy father's will. It is disregarded, allowed to sit in one place (usually hot) for hours at a time, overlooked by all, and finally subjected to several tests, mostly routine, by the clerk in the law office or the student technician in the laboratory. The answers or results are considered as being unimportant and usually false—of course, if they really are false, the child or patient is treated with the utmost respect and incorrectly.

Now if the child is a Prodigal Son or the specimen is Catheterized, then the fatted calf is killed for one and "positive" findings are present in the other. Of course, the "stat" catheterized specimen must be allowed to rest awhile in suitable warm surroundings for "culture" purposes. The Prodigal Son is assumed to be cultured or he would not be accepted. The average laboratory technicians must reason that if a patient has been subjected to the ordeal of catheterization, then it follows there must be something wrong with his urinary tract; so they hunt diligently until "an occasional wbc," "occasional rbc," and "occasional motile bacteria" can be reported and misinterpreted. The specimen can be studded with cells and swarming with swimming objects, but it takes a special order and five more dollars to get a simple gram stain run.

The average "early morning specimen" brought into the doctor's office by the average married middle-aged multiparous female can well represent the washings of a vagina, chock full of over-night goodies and the final external cleansing of the early morning evacuation. It was collected in whatever was handy and poured (only the Lord and the patient know how) into a half ounce perfume bottle, stored in a warm purse until the 3:00 p.m. appointment and then, if it has not exploded, handed over to the nurse. She will send it to the laboratory where it finds itself associated and examined with the elite catheterized specimens. It may smell like Chanel #5 but the report will read "+2 albumin" (from the bacterial growth and accumulated debris), "wbc-TNTC" and "many bacteria." If the patient happened to be menstruating and poured the specimen into a cough syrup bottle, add "+4 rbc's and +4 sugar." The diagnosis—kidney infection, probably with stones or cancer, and complicated by diabetes.

Let us not overlook our male patients. How many men have been turned down by an insurance company for a $5,000 life insurance policy because of a one glass urine specimen in the presence of a mild anterior urethritis or less. Anything above $5,000 is usually referred to the urologist for the appropriate pyelograms, cystoscopies, cultures (repeated) and several reports in duplicate or triplicate to the company so he will only be rated up to C or D.

Only one more observation and that on the analysis of urine obtained from a patient with an indwelling catheter. Any patient with a catheter (indwelling) more than three or four days will have an infected urine, and it will remain infected in spite of any or all urinary antiseptics as long as the catheter remains indwelling.

This treatise is not concerned with prevention and treatment of urinary tract infections. You will have to let your patients have chills and fever until the next chapter is asked for.

Lee Sharp, M.D.
Pensacola

President's Page

Medical Politics

Politics is defined by Webster as the science and art of government; or political affairs viewed as a profession, interest or the like. Politician is defined as one primarily interested in political offices. Medical politics is a peculiar breed. It has no definition in Webster's dictionary. It involves the establishment of policy of medical associations not by the professional politician but by leaders whose primary dedication is to the profession of MEDICINE. I propose that the doctors in medical politics enter it with thoughts different from those of the professional politician. The ethics and rewards of the two fields differ considerably, yet many physicians seem to consider the two in the same light.

As a rule officers I have known in our Association have been physicians who were willing to take a position on an issue and stand up and be counted when necessary. This characteristic has not always endeared that individual to his colleagues, although eventual appreciation may be expressed by election to an office. Then, time-consuming responsibilities begin which terminate only on completion of his term. Usually, an interest is developed, if not already acquired, in the affairs of organized medicine. This interest may be accelerated by the responsibilities of the office held. Knowledge gained by the officer on medicine's many problems is of value only when utilized by him in behalf of his colleagues. Associations with men with similar interests are the greatest reward the medical politician receives but these do not pay bills and feed families. Monetary rewards rarely, if ever, compensate for income lost away from medical practice. The Florida Medical Association has been more generous than many state associations in providing officer expenses in recent years thereby making it possible, but not in itself attractive, for an interested physician to do his so-called "political job." Accolades are few for a job well done but expressions of criticism are many when physicians disagree with an officer's actions.

Far different is the work of the career politician in government. His job represents his life's work. Election to an office is his goal or a step toward his goal. Apparently, financial reward and political influence compensate for many shortcomings of his office.

On the other hand, perhaps it is natural that the medical politico's telephone rings less often regarding patient care as calls concerning organized medicine increase. It is imperative that our officer devote considerable time to the affairs of our Association since he must be familiar with various phases of medicine and its organization if he is to lead or participate in the policy making of the group. Policy making is his most important duty if the affairs of medicine are to remain in the hands of physicians and not be dictated by lay employees who are supposed to carry out policies and serve in advisory capacities only. For convenience some may suggest the employment of physicians, turning policy as well as management over to them, but these physicians would no longer practice medicine and might easily forget the practitioner's viewpoint. Dictatorship and dogmatism could result from unbridled authority without supervision; so practicing physicians must continue to take the time to govern our organization.

As one who is completing many years of service to Florida medicine, I am free to say that the responsibilities of being your spokesman are sometimes rewarding, and other times frustrating and deeply discouraging. I can assure you that I will never malign nor belittle the dedicated efforts of our future leaders. I will not be guilty of making remarks such as "No need to send a patient to him, he is a politician—does not have time for medical practice;" or "It is good that he has the time for politics; I do not, (as I undertake recreational pursuits which the officer may no longer be able to fit into his busy schedule)," or "the worst thing that ever happened to you was being elected to that office."

Too many remarks of similar nature reach the ears of our office holders when encouragement may be their primary need at the time. Along this line I hope I will give an officer a word of approval or of constructive criticism here and there to help as he begins to reflect if it is worth it all, and I will tell him that he will realize a sense of satisfaction and cherish the friendships and associations that he makes as our leader.

We members must indicate our appreciation for the services of those who are to serve us if we are to attract superior men and women for our "political" jobs. He who serves must have a vision of even greater potential for future accomplishments if we are to progress as an association, and must be able to work with other officers and members if we are to have the harmony and the united voice we so vitally need for the advancement of the science and art of medicine.

Sam Day

House of Delegates

Proceedings of Called Meeting

George Washington Hotel, Jacksonville, Florida
February 21, 1965

A called meeting of the House of Delegates of the Florida Medical Association convened in the Auditorium of the George Washington Hotel, Jacksonville, at 10:20 a.m. on Sunday, February 21, 1965, with Dr. Franklin J. Evans, Speaker of the House, presiding.

Dr. G. Dekle Taylor pronounced the invocation.

Dr. Irving E. Hall Jr., Chairman of the Credentials Committee, reported that a quorum was present, 127 delegates being registered and a majority of the county medical societies represented (30 of 43). (Subsequent report of the Credentials Committee showed 153 delegates registered of the 246 eligible.)

Motion was carried unanimously to seat the delegates.

A roster of delegates seated is on file in the Association's office.

Motion was carried to approve the minutes of the last House of Delegates' meeting held at the Diplomat Hotel, Hollywood, May 7 and 10, 1964 as published in the July 1964 Journal of the Florida Medical Association.

The President, Dr. Samuel M. Day, briefly outlined the Association's legislative programs, both national and state. He called on Dr. Joseph C. Von Thron, Chairman of the Committee on National Legislation, to discuss the national program, and Dr. George S. Palmer, Chairman of the Committee on State Legislation, to discuss the state program.

Dr. Day announced that the American Medical Association's Board of Trustees has voted to make funds available to county and state medical associations in the amount of $2.50 for each AMA member on a matching fund basis to conduct a concentrated educational campaign, and urged the county medical societies to appropriate the matching funds and apply for the AMA funds.

The Speaker announced that this was a special closed meeting of the House of Delegates for delegates and invited guests only, and that the purpose of the meeting would be explained by Dr. Day.

Dr. Day stated the purpose of this meeting was to consider recommendations to the Florida legislature for payment of physicians' fees under the Kerr-Mills program and other related programs. He reviewed the history of Florida's indigent care programs and their influence on national programs. He read the Association's policy on indigent care which was adopted by the 1960 House of Delegates:

> Statement of Policy — Physicians' services shall be made available without charge to those patients who are recognized and declared to be indigent as so determined through application of criteria as approved by the respective component county medical societies of the Florida Medical Association.

and the amendment to this policy adopted by the 1964 House of Delegates:

> That the Association's statement of policy regarding availability of physicians' services to indigent persons be reaffirmed and that county medical societies be requested to re-examine their practices with reference to care of indigent persons. It is further recommended that an additional sentence be added to the Association's policy to read "That where care is provided in the doctor's office he is then entitled to a fee for reimbursable costs, excluding services."

He explained that Florida is one of only five states not now receiving payment for physicians' services under the MAA program. He outlined the three bills now under consideration by the Ways and Means Committee—the King-Anderson Bill, the AMA's Eldercare Bill presented by Representative Herlong, and the administration's related bills.

He stated that the time had now arrived when it seemed necessary to reevaluate the Association's position.

The Speaker recognized Dr. James D. Beeson, delegate from Duval County Medical Society.

Dr. Beeson moved THAT ALL APPROPRIATE ORGANS OF THE FLORIDA MEDICAL ASSOCIATION MAKE CONCERTED EF-

FORTS TO ACHIEVE ENABLING LEGISLATION OF THE FLORIDA STATE LEGISLATURE SO THAT IN THE EVENT OF ENACTMENT OF FEDERAL LEGISLATION, SUPPLANTING CURRENT FLORIDA KERR-MILLS DISTRIBUTION PATTERNS, SUCH KERR-MILLS APPROPRIATIONS MAY THEN BE APPLIED TO PHYSICIANS' FEES IN FLORIDA.

Motion was seconded.

The motion was opposed by Drs. Robert Zellner, Dean Steward and Jere Annis, expressing the opinion that our agreement to accept physicians' fees under the Kerr-Mills program would be used later to the doctors' disadvantage. It is inconsistent and poor public relations to request the legislature to pay doctors for the care of the indigent. Florida doctors should continue to care for the indigent without pay, charge those who can pay and set their own fees.

Support for the motion in part was provided by Drs. Phillip Hampton, James Beeson, Russell Carson and Homer Pearson (on request). Emphasis was placed on the physician's responsibility to provide medical services efficiently and economically to the satisfaction of the patients and the thought was expressed that the proper way to provide adequate care in today's economy and protect the physician's freedom is to provide medical services by some means other than charity. Since physicians' services are provided under national Kerr-Mills and may be even further provided under new federal legislation, it seems logical now for Florida to receive them.

Additional discussion followed.

Dr. Charles K. Donegan, St. Petersburg, stated his society was unalterably opposed to the motion. He moved that the motion on the floor be tabled.

Point of order established the parliamentary fact that a vote to table would not eliminate endorsement of the AMA's Eldercare program (Herlong-Curtis Bill) and its implementation by the state of Florida.

The motion to table was passed by a standing vote majority.

The Speaker read a resolution from St. Johns County Medical Society regarding non-participation in the King-Anderson Bill if passed. He stated that in order to consider this subject, it would require a unanimous vote of the House.

The House voted not to consider the St. Johns resolution.

Dr. Hampton moved THAT THE FLORIDA MEDICAL ASSOCIATION APPROVE THE ELDERCARE PLAN AS RECOMMENDED BY THE AMERICAN MEDICAL ASSOCIATION AND AS PRESENTED TO CONGRESS BY REPRESENTATIVE HERLONG, H. R. 3727, AND THAT WE URGE THE FLORIDA LEGISLATURE TO PASS ENABLING LEGISLATION TO IMPLEMENT THAT LAW.

Motion was seconded.

Dr. Annis spoke briefly in favor of this motion. He expressed the opinion that medicine should present a united front.

Motion carried unanimously.

Dr. Day urged all members of the House to remind their county medical societies of their obligation to provide medical care to all regardless of their ability to pay and to do so without embarrassment. He also asked that they educate their patients about the Herlong-Curtis Bill and urge their patients to express themselves to Congress in favor of this AMA Bill.

Dr. Reddin Britt, of St. Johns, asked the privilege of the floor for a matter of information. He stated that the Welfare Board plans to seek an end to the $81 per family limit on payments to dependent children. He asked that the House familiarize themselves on this subject as individuals and discuss it with members of the Florida legislature.

The meeting was adjourned at 12:35 p.m.

Association News

The Ninety-First Annual Meeting Florida Medical Association

The Ninety-First Annual Meeting of the Florida Medical Association will begin on Thursday, April 22, 1965, in the convention hall of the Americana Hotel, Bal Harbour, Fla.

Unusual in this year's Scientific Sessions will be the use of color television provided by the Smith Kline & French color television unit. This medium of scientific presentation has been used only occasionally in state society meetings heretofore, and we count ourselves fortunate to have their facilities made available to the Florida Medical Association.

There will be three color television presentations. The first, which begins the Scientific Sessions at 2:00 p.m., Thursday, April 22, will be in the field of cardiac surgery and will be moderated by James A. Jude, M.D., Professor of Surgery, University of Miami School of Medicine. The second program will be presented at 9:00 a.m., Friday, April 23, by Augusto Sarmiento, M.D., Associate Professor of Orthopedic Surgery, University of Miami School of Medicine. The subject will be the rehabilitation of patients with various medical and orthopedic disabilities. This program replaces the film program usually held in this segment of the meeting. The third session of the scientific program will begin at 2:00 p.m., Friday, April 23, with a television program dealing with recent advances in cancer therapy, moderated by William Harrington, M.D., Professor and Chairman of the Department of Medicine, University of Miami School of Medicine.

In addition, a portion of the program will be devoted to fibrinolysin and its significance to the general physician, obstetrician and surgeon. A group of speakers will discuss various subjects in the field of trauma. Distinguished visiting speakers, including George T. Pack, M.D., New York City, who is the guest of Samuel M. Day, M.D., President of the Florida Medical Association, Denton A. Cooley, M.D., Professor of Surgery, Baylor University College of Medicine, Houston, Texas, and Henry N. Harkins, M.D., Professor and Chairman, Department of Surgery, University of Washington School of Medicine, Seattle, Washington, will be presented in cooperation with various specialty societies. Outstanding in-state speakers from the Association will also participate in the program.

The program has been scheduled so as to avoid conflict with the business of the Association and the specialty society meetings held in conjunction with the Association's Annual Meeting. The Committee on Scientific Work has had the wholehearted support of the Association's officers and staff, and of the individual members who represent special interest groups within the Association. The Committee is grateful for this help in providing the scientific program and is hopeful that members attending the Annual Meeting will participate in the Scientific Sessions in larger numbers than ever before.

Richard C. Dever, M.D., Chairman
Committee on Scientific Work

Project Hope

When the S. S. HOPE finished its maiden voyage throughout Indonesia in 1960 and 1961, it left behind a permanent hospital installation in Viet Nam to carry on its medical missionary work and teachings. Likewise, when it finished its Peruvian expedition in 1962-1963, it founded a similar hospital project in Trujillo, Peru, to carry on the work only started by the one year stay of the ship there. The Hope has just returned from its third voyage after a year's most successful stay in Guayaquil, Ecuador.

The work it has and is accomplishing in Viet Nam stands this country in good stead during these difficult times. Moreover, its visits to South America are agreed by all to be the most effective effort this nation has ever made in Latin America. The ship now leaves for another continent, initiating its work in Africa this fall.

Those who have worked on the Hope and have seen the tremendous impact this project has made on United States-South American relations, realize how important it is that this work continue. Especially is it important to us in Florida that South America does not become another and larger Cuba.

It is with pride that the Inter-American Relations Subcommittee of the Board of Governors of the Florida Medical Association announces that Project Hope has offered us the permanent hospital installation for the Ecuadorian voyage, and will allow us the honor of staffing it with an all-Florida physician team. The facility given us for this undertaking is a 250 bed hospital located in the picturesque town of Cuenca, 8,000 feet in the Andes, the site of one of Ecuador's three medical schools.

Our chief of staff, James B. Madison, a Miami physician, has already been selected and is now in Cuenca organizing our project. We need to supply him with a team of Florida doctors for the coming year. Men are needed in all the major specialties and in many of the minor ones.

Arrangements for the Cuenca Hope-FMA project will be similar to those that exist on the ship during its voyages. Permanent staff physicians who can serve a minimum of 10 months will be provided full transportation and maintenance by the Hope, with a modest stipend of approximately $6,000 a year depending upon qualifications. Rotating staff physicians, who can serve a two month period, are provided living accommodations and transportation. Those physicians who can serve less than two months are asked to provide their own transportation.

It is important for us to make this a success as it is the first instance in which Project Hope has allowed another organization to share single identification with the Project. Such success will mean not only extensive good will for the Association and the state of Florida throughout South America, but will also serve to encourage Hope to expand its most effective mission through other such alliances.

If you wish to serve your Association, profession, state, and nation while having the experience of your professional life, write the Inter-American Relations Subcommittee at the Association headquarters for an application form.

Subcommittee on Inter-American Relations
John J. Fisher, M.D., Chairman
Jacksonville

Letters

To the Editor:

The Editorial in the August 1964 Journal by Dr. Dan C. Roehm of Ft. Lauderdale was very welcome to me. It was in rebuttal to my FMAJ editorial in the March 1963 issue, and was in considerable contrast to the comments previously received. These had been almost exclusively from specialists, and enthusiastically agreed with the point of view I expressed.

Dr. Roehm's editorial, published 17 months after my original comment, is inaccurate with regard to the "present fee schedule provided

(Continued on page 268)

Members of the "Snickering Schnitzelbankers," a German band composed of doctors and their wives, are shown as they entertained the DeSoto-Hardee-Glades County Medical Society at its annual Christmas party last December in Arcadia. From left, they are Dr. Gordon H. McSwain, tuba; Dr. Calvin W. Martin, trombone; Mrs. Calvin W. Martin, clarinet; Mrs. Gordon H. McSwain, piano; Mr. John Maasen, the only lay member, clarinet; and Dr. Harold S. Agnew, trumpet. One of the highlights of the occasion was their rendition of the Schnitzelbank song with response by the assembled doctors and their wives. The theme of the party was a German "Biergarten" and decorations transformed the room into a Bavarian scene. The band was organized two years ago and continues to thrive as a successful musical organization, unique in the community.

File: Diarrhea

Recommended Dosage of Lomotil Liquid to Control Diarrhea

LOMOTIL®

INITIAL LOMOTIL LIQUID DOSAGE*

Age	
3-6 mo.	½ tsp. t.i.d. (3 mg.)
6-12 mo.	½ tsp. q.i.d. (4 mg.)
1-2 yr.	½ tsp. 5 times daily (5 mg.)
2-5 yr.	1 tsp. t.i.d. (6 mg.)
5-8 yr.	1 tsp. q.i.d. (8 mg.)
8-12 yr.	1 tsp. 5 times daily (10 mg.)
Adult	2 tsp. 5 times daily (20 mg.) (or 2 tablets q.i.d.)

*Based on 4 cc. per average teaspoonful.
Note: After diarrhea is controlled the initial dosage can usually be reduced to meet the requirements of the individual patient.

LOMOTIL® TABLETS/LIQUID

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride .....2.5 mg.
(Warning: May be habit forming)
atropine sulfate .....0.025 mg.

Precautions
Lomotil is an exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates.

Cautions and Side Effects
Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness and insomnia.
Lomotil is a brand of diphenoxylate hydrochloride with atropine sulfate; the subtherapeutic amount of atropine is added to discourage deliberate overdosage.

SEARLE *Research in the Service of Medicine*

Deaths

Davies, William Walter Jr., Miami; born in Delaware, Ohio, Sept. 15, 1891; Rush Medical College, Chicago, 1917; interned at Presbyterian Hospital, Chicago; practiced aviation medicine in the United States Navy for 30 years; was for some time head of the Aviation Medicine Department, United States Navy Medical School, was a veteran of World War I and World War II, serving in the latter with the rank of captain; was a member of the American Medical Association and a fellow of the American College of Physicians; died Nov. 17, 1964, aged 73.

Ford, Edward White, Crescent City; born in Fordsville, Ky., June 1, 1867; Jefferson Medical College of Philadelphia, 1891; interned at City Hospital, Altoona, Pa.; engaged in the general practice of medicine in Fordsville for three years and in Hartford, Ky., for 25 years before moving to Florida in 1919 where he continued to practice at Crescent City for 40 years; was a veteran of World War I, serving in the Army Medical Corps with the rank of major; held honorary membership in the American Medical Association and the Florida Medical Association; died Nov. 12, 1964, aged 97.

Martin, Emmett Edward, Haines City; born in Hilton, Ga., Dec. 16, 1893; Medical College of Georgia, Augusta, 1924; interned at the Atlantic Coast Line Railroad Hospital, Waycross, Ga.; practiced briefly in High Springs before locating permanently in Haines City in 1925, where he engaged in general practice for 40 years; was a veteran of World War I and served in the Army Medical Corps throughout World War II, leaving the service with the rank of major; in 1958 was president of the Polk County Medical Association; held membership in the American Medical Association, Southern Medical Association and Atlantic Coast Line Railroad Surgeons Association; died February 4, aged 71.

Moses, Robert Jesua Sr., Hialeah; born in Smyrna, Turkey, 1889; Stritch School of Medicine of Loyola University, Chicago, 1922; interned at West Suburban Hospital, Oak Park, Ill.; engaged in the general practice of medicine in Chicago prior to locating in Hialeah in 1963; was a diplomate of the American Board of Surgery; held membership in the American Medical Association; died January 9, aged 66.

Indications: Many types of edema involving retention of salt and water.
Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.
Precautions: Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.
Side Effects: Agranulocytosis, constipation, dizziness, dysuria, headache, hyperglycemia, hyperuricemia, impotence, leukopenia, muscle cramps, nausea, postural hypotension, purpura, thrombocytopenia, transient myopia, urticaria, vomiting and weakness.
Average Dosage: One tablet (100 mg.) daily with breakfast.
Availability: Tablets of 100 mg. in bottles of 100 and 1000.
For full details, see the complete prescribing information.

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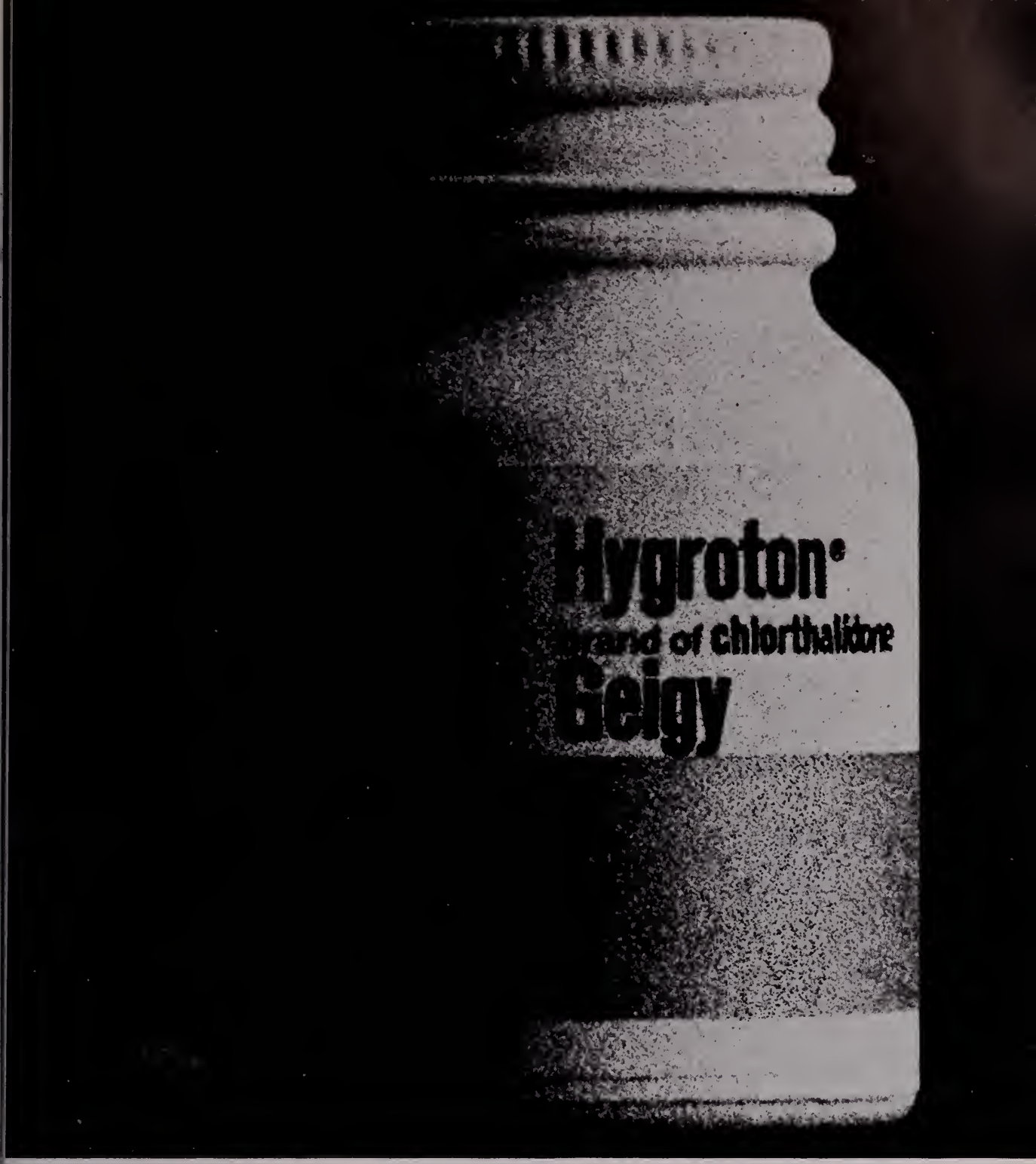

ho needs it?

Patients with edema.
Edema in congestive heart failure.
Or in the premenstrual syndrome.
Edema in pregnancy...or obesity.
Patients you want to bring to dry weight.
And those you want to keep at dry weigh
Those you want on single daily doses.
And those requiring even fewer doses.
Those resistant to other therapy.
And those intolerant of other diuretics.
Those who have to pinch pennies.
And those who can afford the best.

under workmen's compensation." Subsequent to my editorial, the compensation fee schedule was drastically changed and, surprisingly, resolved a large part of the problem that I used as a take-off point for my comment. It does indeed now make provision for some degree of adjustment of fees to doctors who have to handle truly special problems.

The fundamental concept I was trying to promote, however, is still the same even though a way has been found to minimize the conflict brought on by third party intrusion in compensation fee schedules.

The concept of the "limitist" has evidently appeared rather galling to Dr. Roehm! To repeat briefly: A generalist proceeds to treat patients with any disorder that presents no special problems; if it falls outside the category that he is sufficiently experienced to manage, he refers it to a specialist. A true specialist (in the historic sense and in the practical sense) treats *only* the special problems and is therefore in no competition with the general practitioners.

The third category of physician is neither generalist nor specialist because he takes care of patients largely according to the part of the body involved, accepting minor as well as major problems.

Now the foregoing is a statement of fact, not a "highly original proposal." This is the way things actually are, whether we like them or not. The limitist therefore is in constant competition with such general practitioners as there are in a community.

I am in favor of competition between doctors. This can make for steady improvement of standards. My emphasis on the "limitist" concept is simply to point out that such practitioners should not be entitled to categorical superiority and exclusive rights.

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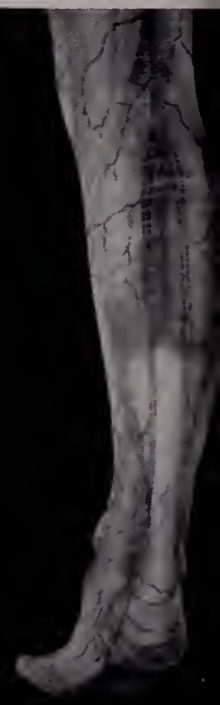

IN PERIPHERAL VASCULAR DISEAS

where ischemia causes pain, spasm, ache, intermittent claudication; a coldness, numbness or ulc of extremities.

I refer all special problems to specialists. These amount to roughly 10% or fewer of my patients. Too small a percentage? All right, for this discussion let us assume that I refer 20% of my patients.

This leaves 80% of my patients who are seen fairly promptly on the day they need to be seen, at a general practitioner's fee. Further, somewhere around 40% of my patients have more than one complaint, usually in separate specialty classifications. Attention for these is usually at no extra charge.

Suppose all of these patients that I take care of myself went instead to "limitists" in one category or another, and that, marvelously, they were able to pick the right one to go to. Each limitist has trained himself with the intent of being a specialist, but instead he is spending 80% of his time on the simpler problems. Naturally enough, having gone through the long training he feels entitled to a specialist's fee for all his patients.

Further, he has organized to take care of the serious problems which usually are very time-consuming. Therefore, he can scarcely take care of patients in numbers equivalent to a generalist's capacity. Any physician would freely admit that 30 limitists of suitable specialty coverage cannot possibly do the work of 30 general practitioners. And what a waste of all that special training to be spending 80% of your time on "the simpler services!"

Dr. Roehm says: "We 'limitists' want to be placed neither on an impossibly high cloud of Dr. Manry's (true specialist), nor on the same plane as the generalists who are performing the simpler services."

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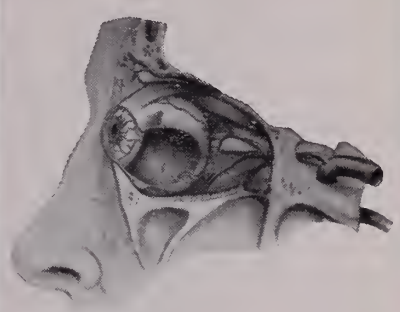

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News

A two day seminar, "The Stroke Patient," is being presented by the University of Miami School of Medicine April 20-21 at the Americana Hotel, Miami Beach, immediately preceding the Annual Meeting of the Florida Medical Association. A distinguished guest faculty and members of the medical school staff will discuss prevention, management and rehabilitation of the stroke patient.

The 1965 scientific session of the American Cancer Society on "Hormones and Chemotherapy for Cancer—A Critical Appraisal" will be held on June 16 at the Drake Hotel in Philadelphia.

The 36th annual scientific meeting of the Aerospace Medical Association is being held April 26-29 at the New York Hilton in New York City.

The annual meeting of the Florida Thoracic Society and the Florida Tuberculosis and Respiratory Disease Association has been scheduled for April 23-24 at the New Everglades Hotel in Miami.

Dr. William G. Eckert of Orlando has been elected secretary of the pathology section of the American Society of Forensic Medicine.

The 7th Annual Lecture of the Alpha Chapter of Florida, Alpha Omega Alpha, will be presented by Dr. Byron H. Waksman, Professor and Chairman, Department of Microbiology, Yale University School of Medicine, April 6, at noon in the second floor central auditorium of Jackson Memorial Hospital, Miami. Dr. Waksman's topic is "The Role of the Thymus in Immune Responses."

The 114th annual convention of the American Medical Association is being held June 20-24 in New York City. The May 10 issue of JAMA will have the complete scientific program, forms for advance registration and hotel accommodations.

The regular monthly meeting of the North Florida Pathologists Association will be held at 8:00 p.m., Thursday, April 22 at Duval Medical Center. Dr. C. Ian Hood, of the University of Florida College of Medicine, will moderate a slide seminar.

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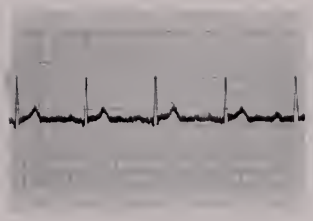

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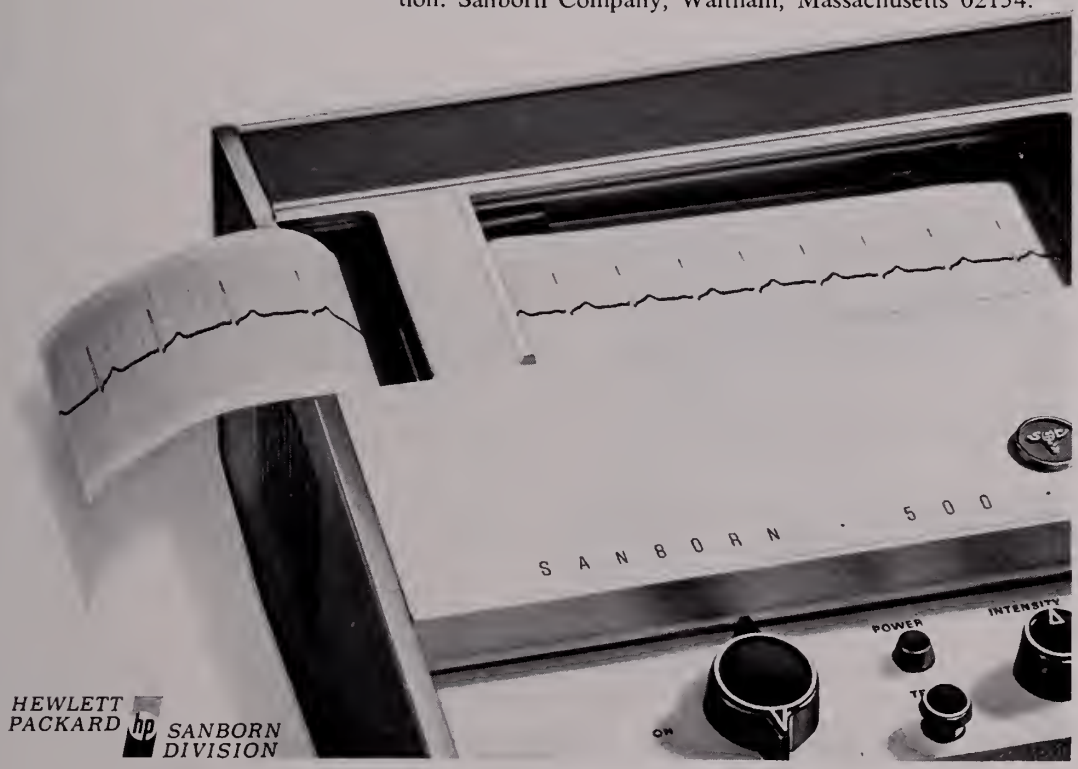

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1. Adams, J.: J. Tenn. Med. Ass. 50:446, Nov., 1957. **2.** Arachi, N. and Gheradi, F.: Quad. Urol. 9:156, Apr.-June, 1959. **3.** Arneil, G. C.: Antibiot. Ann. 1958-1959:327. **4.** Arrigoni, G. et al.: Minerva Med. 48:2701, Aug. 25, 1957. **5.** Baur, A.: Aerztl. Prax. 11:1845, Dec. 5, 1959. **6.** Bellomio, S. et al.: Riv. Ital. Tracoma, vol. 10, Nos. 1-2, Jan.-June, 1958. **7.** Bellomio, S. et al.: Riv. Ital. Tracoma, vol. 11, No. 1, Jan.-Mar., 1959. **8.** Belonoschkin, B. and Lindgren, M.: Svensk. Lakartidn. 56:2134, July 31, 1959. **9.** Bergdahl, U.: Svensk. Lakartidn. 55:1715, June 6, 1958. **10.** Bhattacharyya, M. N. and Bhuyan, J. N.: Antiseptic 56:611, Aug., 1959. **11.** Blass, R.: Schweiz. Med. Wschr. 89:158, Feb. 7, 1959. **12.** Bolognesi, C.: Minerva Med. 48:2695, Aug. 25, 1957. **13.** Candela, R. B.: Med. Esp. 46:273, Oct., 1961. **14.** Cappelli, E.: Minerva Med. 48:2690, Aug. 25, 1957. **15.** Carter, C. H. and Maley, M. C.: Antibiot. Ann. 1956-1957:51. **16.** Caruselli, M. and Musca, A.: Minerva Med. 51:3516, Oct. 17, 1960. **17.** Ceitlin, J.: Med. Panamer. 15.72, Aug. 1, 1960. **18.** Chattas, A. et al.: Antibiot. Med. 7:300, May, 1960. **19.** Chiarenza, A.: Minerva Med. 48:2692, Aug. 25, 1957. **20.** Cooper, J. et al.: Antibiot. Med. 5:302, May, 1958. **21.** Cupples, J. F. B. and Perry, A. W.: Canad. Med. Ass. J. 77:699, Oct. 1, 1957. **22.** David, N. A. and Carter, P. B.: Rocky Mountain Med. J. 58:27, Mar., 1961. **23.** Davis, W. G.: Clin. Rev. 1:21, Apr., 1958. **24.** de Lellis, J.: Dia Med., Apr. 24, 1958, p. 824. **25.** Dienz, H.: Aerztl. Prax. 13:1797, 1961. **26.** Dietel, V. and Meissner, F.: Deutsch. Gesundh. 16:2470, Dec. 28, 1961. **27.** Dryjski, J.: Pol. Tyg. Lek. 24:1113, June 24, 1959. **28.** Durrieu, C. A. et al.: Antibiot. Ann. 1958-1959:297. **29.** Faz Tabio, H.: Rev. Cuba. Pediat. 30:219, Apr., 1958. **30.** Febles Alonzo, D. and Batthyany, C.: Actas Ginecotocol. (Uruguay) 13:4, Aug., 1959. **31.** Febles Alonzo, D. and Biderman, I.: Antibiot. Ann. 1958-1959:270. **32.** Fiora, F. and Compa, F.: Dia Med., Apr 3, 1958, p. 570. **33.** Garre, E.: Antibiot. Med. 7:285, May, 1960. **34.** Geiger, K.: Praxis 15:365, Apr. 9, 1959. **35.** Gemma, G. B. et al.: Minerva Med. 48:2643, Aug. 25, 1957. **36.** Gerner, G.: Arzneimittelforschung 9.484, Aug., 1959. **37.** Grazia, G.: Clin. Pediat. (Bologna) 41:1005, Nov., 1959. **38.** Greco, O.: Med. Condotto-Med. Prat. 9:497, 1958. **39.** Hammerl, H.: Wien. Med. Wschr. 108:629, July 26, 1958. **40.** Henne, H. F.: Med. Klin., No. 29, July 18, 1958, p. 1267. **41.** Heredia Diaz, J. et al.: Medicina (Mex.) 38:308, July 10, 1958. **42.** Herrera, W. A.: Dia Med. 30:3116, Dec. 8, 1958. **43.** Hoffmann, H.: Medizinische (Stuttgart) 45:1830, Nov. 8, 1958. **44.** Kelleher, D.: Practitioner 182:227, Feb., 1959. **45.** Kleine, W. and Hagen, H.: Ther. Gegenw. 98:171, Apr., 1959. **46.** Klovstad, O.: T. Norsk. Laegeforen. 77:681, Aug. 15, 1957. **47.** Kobari, K. and Tajiri, I.: Naika No Ryoiki (Field of Internal Medicine) 7:245, May, 1959. **48.** Kohler, H. F.: Clin. Rev. 1:16, Apr., 1958. **49.** Kraljevic, R. et al.: Antibiot. Med. 5:364, June, 1958. **50.** La Caille, R. A. and Prigot, A.: Antibiot. Ann. 1956-1957 67. **51.** Lapeyre, L. et al.: Marseille Med. 99:953, 1962. **52.** Levi, W. M., Jr. and Kredel, F. E.: J. S. Carolina Med. Ass. 53:178, May, 1957. **53.** Loughlin, E. H. et al.: Antibiot. Ann. 1958-1959:293. **54.** Loughlin, E. H. et al.: Antibiot. Med. 7:739, Dec., 1960. **55.** Mathur, S. N. and Joshi, V. S.: J. Indian Med. Ass. 34:437, June 1, 1960. **56.** Moggian, G.: Minerva Med. 48:2648, Aug. 25, 1957. **57.** Molinelli, E. A. et al.: Antibiot. Ann. 1957-1958.692. **58.** Montilli, G. and Avellino, M.: Dermatologica (Basel) 9:2, 1958. **59.** Morador, J. L. et al.: Antibiot. Ann. 1959-1960:716. **60.** Morador, J. L. and Saldana Tate, L.: An. Ateneo, Clin. Quirur. 1:52, Jan., 1958. **61.** Morel, A. S.: Clin. Rev. 1:18, July, 1958. **62.** Morey, G. S. et al.: Rev. Hosp. Nino (Lima) 18:293, 1957. **63.** Ottolenghi, C. E. et al.: Bol. Soc. Cir. B. Air. 41:739, Nov. 6, 1957. **64.** Pagola, J. G. et al.: Antibiot. Ann. 1958-1959:287. **65.** Pavone, M. et al.: Minerva Urol. 70:121, Sept.-Oct., 1958. **66.** Porrazzo, F.: Gazz. Med. Ital. 118:550, Dec., 1959. **67.** Prats, F. and de la Parra, M. A.: Antibiot. Ann. 1959-1960:484. **68.** Prokop, O.: Prakt. Arzt. 12:145, Feb. 15, 1958. **69.** Ramirez Boettner, C. M. et al.: Rev. Med. Paraguay 5:269, July-Sept., 1960. **70.** Randig, K.: Deutsch. Med. J. 8:447, Aug. 15, 1957. **71.** Saavedra Amaro, S. and Lopez Zepeda, L.: Medicina (Mex.) 38:396, Aug. 25, 1958. **72.** Saldana Sotomayor, F.: Medicina (Mex.) 39:191, May 10, 1959. **73.** Santos, A.: Rev. Brasil. Med. 16:463, July, 1959. **74.** Schenone, H.: Antibiot. Ann. 1958-1959:316. **75.** Schunk, A.: Int. Rec. Med. 173:143, Mar., 1960. **76.** Sgarzini, L. and Amato, R.: Ann. Stomat. 7:499, July, 1958. **77.** Shubin, H.: Antibiot. Med. 4:174, Mar., 1957. **78.** Sundberg, R. H.: Antibiot. Med. 7:115, Feb., 1960. **79.** Talbot, J. R.: Wisconsin Med. J. 57:237, June, 1958. **80.** Tato, J. M. et al.: Antibiot. Ann. 1957-1958:675. **81.** Weithofer, W.: Medizinische (Stuttgart) No. 33-34:1490, Aug. 22, 1959. **82.** Willcox, R. R. and Rosedale, N.: Brit. J. Vener. Dis. 38:19, Mar., 1962. **83.** Willemot, J. P. et al.: Bruxelles Med. 38:1026, June 22, 1958. **84.** Winton, S. S. and Chesrow, E. J.: Antibiot. Ann. 1956-1957:55. **85.** Wolman, B.: Practitioner 185:199, Aug., 1960. **86.** Yodh, B. B.: J. J. J. Group Hosp. 5:183, July, 1960. **87.** Zaldivar, C. G. and Falcone, F. L.: Rev. Hosp. Nino (Lima) 20:141, June, 1958.

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Bone and joint infections	71	64
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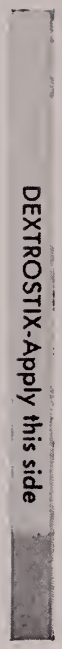

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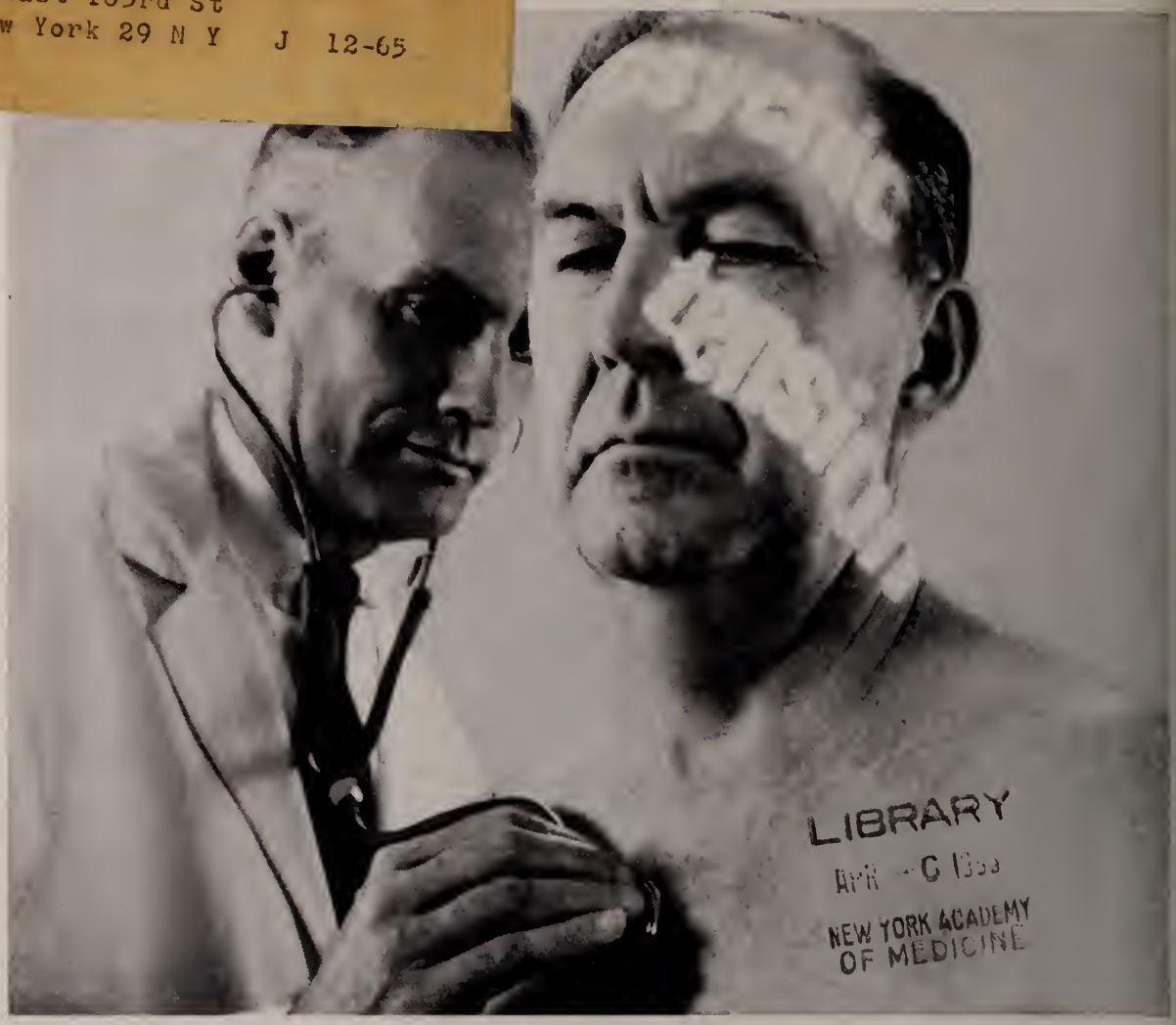

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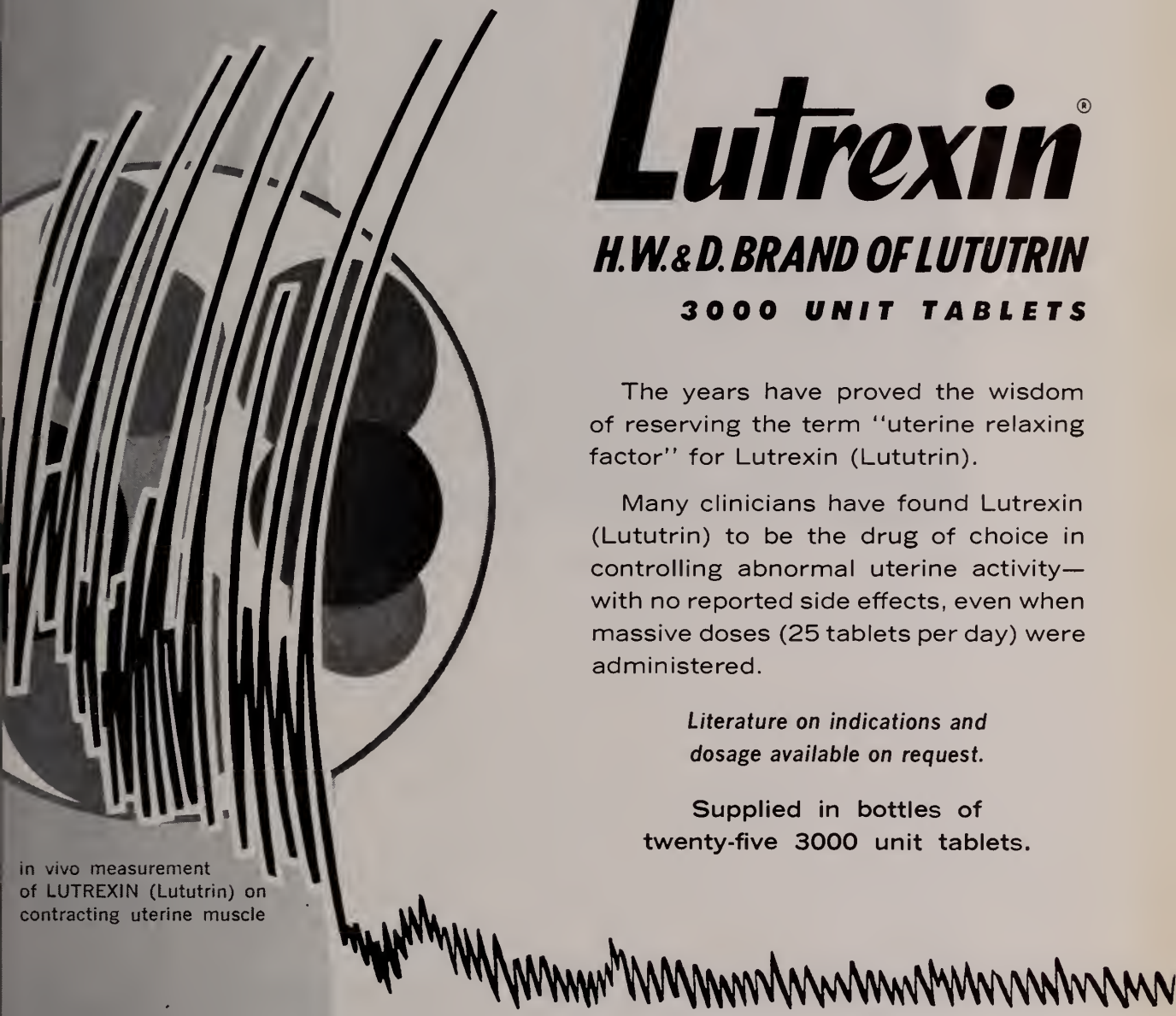

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Of 341 patients with confirmed OB-GYN infections... 320 or 93.8% were treated successfully with Signemycin®

Note:
In 50 cases of serious puerperal and postabortal infections treated with Signemycin, complete cure was observed in 49 patients.* Duration of therapy ranged from three to eight days. Appropriate surgical measures were applied as indicated.

*Heredia Diaz, J. et al.: Medicina (Mex.) 38:308, July 10, 1958.

Condition	No. of Patients	No. Responded to Signemycin
Abortion, infected	45	44
Adnexitis (parametritis)	66	61
Cervicitis	18	18
Endometritis	64	61
Mastitis and breast abscess	44	42
Puerperal sepsis	14	14
Salpingitis	39	34
Other ob-gyn infections	51	46
Totals	341	320 (93.8%)

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tetracycline HCl, 167 mg.; oleandomycin as triacetyloleandomycin, 83 mg. capsules (250 mg.)

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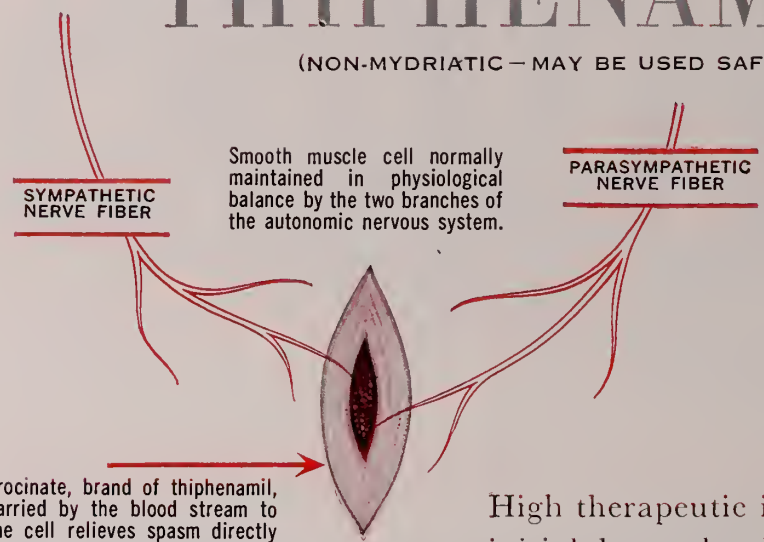

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Of 1,028 patients with confirmed respiratory infections... 954 or 92.8% were treated successfully with Signemycin®

Note:
Hammerl* selected his patients for treatment with Signemycin on the basis of demonstrated bacteriological resistance to other antibiotics or failure of previous therapy. Of 100 patients with various respiratory tract infections, 95 responded to Signemycin. Pathogens isolated included staphylococci and *Diplococcus pneumoniae*.

*Hammerl, H.: Wien. Med. Wschr. 108:629, July 26, 1958.

Condition	No. of Patients	No. Responded to Signemycin
Abscess, pulmonary	17	16
Bronchiectasis	19	13
Bronchitis	286	267
Bronchopneumonia	192	179
Empyema	12	11
Pneumonia, lobar	150	146
Pneumonia, other febrile	160	150
Various infected pneumopathies	192	172
Totals	1,028	954 (92.8%)

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* AMA Council on Foods and Nutrition: The Regulation of Dietary Fat, *JAMA* 181:411-423 (August 4, 1962).
AMA Council on Foods and Nutrition: Composition of Certain Margarines, *JAMA* 179:719 (March 3, 1962).

Of 425 patients with confirmed G.I. infections... 387 or 91.1% were treated successfully with Signemycin®

Note:
Loughlin and co-workers* achieved cure (absence of parasites) in all 100 of their patients with *chronic amebic colitis*. Feces became negative in all within the planned ten-day period of Signemycin administration. Upon re-examination of the feces six weeks later, the offending pathogen *(E. histolytica)* had reappeared in only 7 cases.

*Loughlin, E. H. et al.: Antibiot. Med. 7:739, Dec., 1960.

Condition	No. of Patients	No. Responded to Signemycin
Amebiasis	237	222
Cholecystitis and cholangitis	105	97
Enteritis	41	31
Peritonitis	15	14
Various, including pancreatitis, appendicitis and colitis	27	23
Totals	425	387 (91.1%)

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Signemycin® Bibliography
1. Adams, J.: J. Tenn. Med. Ass. 50:446, Nov., 1957. 2. Arachi, N. and Gheradi, F.: Quad. Urol. 9:156, Apr.-June, 1959. 3. Arneil, G. C.: Antibiot. Ann. 1958-1959:327. 4. Arrigoni, G. et al.: Minerva Med. 48:2701, Aug. 25, 1957. 5. Baur, A.: Aerztl. Prax. 11:1845, Dec. 5, 1959. 6. Bellomio, S. et al.: Riv. Ital. Tracoma, vol. 10, Nos. 1-2, Jan.-June, 1958. 7. Bellomio, S. et al.: Riv. Ital. Tracoma, vol. 11, No. 1, Jan.-Mar., 1959. 8. Belonoschkin, B. and Lindgren, M.: Svensk. Lakartidn. 56:2134, July 31, 1959. 9. Bergdahl, U.: Svensk. Lakartidn. 55:1715, June 6, 1958. 10. Bhattacharyya, M. N. and Bhuyan, J. N.: Antiseptic 56:611, Aug., 1959. 11. Blass, R.: Schweiz. Med. Wschr. 89:158, Feb. 7, 1959. 12. Bolognesi, C.: Minerva Med. 48:2695, Aug. 25, 1957. 13. Candela, R. B.: Med. Esp. 46:273, Oct., 1961. 14. Cappelli, E.: Minerva Med. 48:2690, Aug. 25, 1957. 15. Carter, C. H. and Maley, M. C.: Antibiot. Ann. 1956-1957:51. 16. Caruselli, M. and Musca, A.: Minerva Med. 51:3516, Oct. 17, 1960. 17. Ceitlin, J.: Med. Panamer. 15:72, Aug. 1, 1960. 18. Chattas, A. et al.: Antibiot. Med. 7:300, May, 1960. 19. Chiarenza, A.: Minerva Med. 48:2692, Aug. 25, 1957. 20. Cooper, J. et al.: Antibiot. Med. 5:302, May, 1958. 21. Cupples, J. F. B. and Perry, A. W.: Canad. Med. Ass. J. 77:699, Oct. 1, 1957. 22. David, N. A. and Carter, P. B.: Rocky Mountain Med. J. 58:27, Mar., 1961. 23. Davis, W. G.: Clin. Rev. 1:21, Apr., 1958. 24. de Lellis, J.: Dia Med., Apr. 24, 1958, p. 824. 25. Dienz, H.: Aerztl. Prax. 13:1797, 1961. 26. Dietel, V. and Meissner, F.: Deutsch. Gesundh. 16:2470, Dec. 28, 1961. 27. Dryjski, J.: Pol. Tyg. Lek. 24:1113, June 24, 1959. 28. Durrieu, C. A. et al.: Antibiot. Ann. 1958-1959:297. 29. Faz Tabio, H.: Rev. Cuba. Pediat. 30:219, Apr., 1958. 30. Febles Alonzo, D. and Batthyany, C.: Actas Ginecotocol. (Uruguay) 13:4, Aug., 1959. 31. Febles Alonzo, D. and Biderman, I.: Antibiot. Ann. 1958-1959:270. 32. Fiora, F. and Compa, F.: Dia Med., Apr. 3, 1958, p. 570. 33. Garre, E.: Antibiot. Med. 7:285, May, 1960. 34. Geiger, K.: Praxis 15:365, Apr. 9, 1959. 35. Gemma, G. B. et al.: Minerva Med. 48:2643, Aug. 25, 1957. 36. Gerner, G.: Arzneimittelforschung 9:484, Aug., 1959. 37. Grazia, G.: Clin. Pediat. (Bologna) 41:1005, Nov., 1959. 38. Greco, O.: Med. Condotto-Med. Prat. 9:497, 1958. 39. Hammerl, H.: Wien. Med. Wschr. 108:629, July 26, 1958. 40. Henne, H. F.: Med. Klin., No. 29, July 18, 1958, p. 1267. 41. Heredia Diaz, J. et al.: Medicina (Mex.) 38:308, July 10, 1958. 42. Herrera, W. A.: Dia Med. 30:3116, Dec. 8, 1958. 43. Hoffmann, H.: Medizinische (Stuttgart) 45:1830, Nov. 8, 1958. 44. Kelleher, D.: Practitioner 182:227, Feb., 1959. 45. Kleine, W. and Hagen, H.: Ther. Gegenw. 98:171, Apr., 1959. 46. Klovstad, O.: T. Norsk. Laegeforen. 77:681, Aug. 15, 1957. 47. Kobari, K. and Tajiri, I.: Naika No Ryoiki (Field of Internal Medicine) 7:245, May, 1959. 48. Kohler, H. F.: Clin. Rev. 1:16, Apr., 1958. 49. Kraljevic, R. et al.: Antibiot. Med. 5:364, June, 1958. 50. La Caille, R. A. and Prigot, A.: Antibiot. Ann. 1956-1957:67. 51. Lapeyre, L. et al.: Marseille Med. 99:953, 1962. 52. Levi, W. M., Jr. and Kredel, F. E.: J. S. Carolina Med. Ass. 53:178, May, 1957. 53. Loughlin, E. H. et al.: Antibiot. Ann. 1958-1959:293. 54. Loughlin, E. H. et al.: Antibiot. Med. 7:739, Dec., 1960. 55. Mathur, S. N. and Joshi, V. S.: J. Indian Med. Ass. 34:437, June 1, 1960. 56. Moggian, G.: Minerva Med. 48:2648, Aug. 25, 1957. 57. Molinelli, E. A. et al.: Antibiot. Ann. 1957-1958:692. 58. Montilli, G. and Avellino, M.: Dermatologica (Basel) 9:2, 1958. 59. Morador, J. L. et al.: Antibiot. Ann. 1959-1960:716. 60. Morador, J. L. and Saldana Tate, L.: An. Ateneo, Clin. Quirur. 1:52, Jan., 1958. 61. Morel, A. S.: Clin. Rev. 1:18, July, 1958. 62. Morey, G. S. et al.: Rev. Hosp. Nino (Lima) 18:293, 1957. 63. Ottolenghi, C. E. et al.: Bol. Soc. Cir. B. Air. 41:739, Nov. 6, 1957. 64. Pagola, J. G. et al.: Antibiot. Ann. 1958-1959:287. 65. Pavone, M. et al.: Minerva Urol. 70:121, Sept.-Oct., 1958. 66. Porrazzo, F.: Gazz. Med. Ital. 118:550, Dec., 1959. 67. Prats, F. and de la Parra, M. A.: Antibiot. Ann. 1959-1960:484. 68. Prokop, O.: Prakt. Arzt. 12:145, Feb. 15, 1958. 69. Ramirez Boettner, C. M. et al.: Rev. Med. Paraguay 5:269, July-Sept., 1960. 70. Randig, K.: Deutsch. Med. J. 8:447, Aug. 15, 1957. 71. Saavedra Amaro, S. and Lopez Zepeda, L.: Medicina (Mex.) 38:396, Aug. 25, 1958. 72. Saldana Sotomayor, F.: Medicina (Mex.) 39:191, May 10, 1959. 73. Santos, A.: Rev. Brasil. Med. 16:463, July, 1959. 74. Schenone, H.: Antibiot. Ann. 1958-1959:316. 75. Schunk, A.: Int. Rec. Med. 173:143, Mar., 1960. 76. Sgarzini, L. and Amato, R.: Ann. Stomat. 7:499, July, 1958. 77. Shubin, H.: Antibiot. Med. 4:174, Mar., 1957. 78. Sundberg, R. H.: Antibiot. Med. 7:115, Feb., 1960. 79. Talbot, J. R.: Wisconsin Med. J. 57:237, June, 1958. 80. Tato, J. M. et al.: Antibiot. Ann. 1957-1958:675. 81. Weithofer, W.: Medizinische (Stuttgart) No. 33-34:1490, Aug. 22, 1959. 82. Willcox, R. R. and Rosedale, N.: Brit. J. Vener. Dis. 38:19, Mar., 1962. 83. Willemot, J. P. et al.: Bruxelles Med. 38:1026, June 22, 1958. 84. Winton, S. S. and Chesrow, E. J.: Antibiot. Ann. 1956-1957:55. 85. Wolman, B.: Practitioner 185:199, Aug., 1960. 86. Yodh, B. B.: J. J. J. Group Hosp. 5:183, July, 1960. 87. Zaldivar, C. G. and Falcone, F. L.: Rev. Hosp. Nino (Lima) 20:141, June, 1958.

SIGNEMYCIN®

Side Effects: Glossitis and allergic reactions, as well as severe anaphylactoid reactions, have been reported as rare side effects. Should significant reaction or idiosyncrasy occur, discontinue medication and institute countermeasures. Use of tetracycline during the last trimester of pregnancy, neonatal period and early childhood may cause discoloration of developing teeth. Reduce usual oral dosage and consider serum level determinations in patients with impaired renal function to prevent possible liver toxicity due to excessive accumulation of antibiotic in the serum.

Precautions: Overgrowth of nonsusceptible organisms may occur. In such cases, discontinue medication and institute appropriate specific therapy as indicated by susceptibility testing. Aluminum hydroxide gel given with antibiotics has been shown to decrease their absorption and is contraindicated. The coloring agents used in Signemycin Syrup and Pediatric Drops may produce red discoloration of stools.

Triacetyloleandomycin, a constituent of Signemycin, administered to adults in daily oral doses of 1.0 Gm. (3 Gm. Signemycin) for periods of more than ten days may produce hepatic dysfunction and jaundice. In the rare patient who requires this high dosage level of Signemycin initially, liver function should be carefully followed and dosage should be reduced, as promptly as possible, to the usual recommended range of 1.0 to 2.0 Gm. per day. Therefore, Signemycin is recommended primarily for the treatment of acute or severe infections, with treatment restricted to a ten-day period. If clinical judgment dictates continuation of therapy beyond ten days, serial monitoring of the liver profile should be carried out, including BSP, transaminase, and cephalin flocculation tests. Changes observed in liver function were reversible following discontinuation of the drug.

Formulas: Capsules: 250 mg. Signemycin (167 mg. tetracycline HCl and 83 mg. oleandomycin as triacetyloleandomycin).

Capsules: 125 mg. Signemycin (83 mg. tetracycline HCl and 42 mg. oleandomycin as triacetyloleandomycin).

Syrup: 125 mg. Signemycin (tetracycline equivalent to 83 mg. tetracycline HCl and 42 mg. oleandomycin as triacetyloleandomycin) per 5 cc.

Pediatric Drops: 100 mg. Signemycin (tetracycline equivalent to 67 mg. tetracycline HCl and 33 mg. oleandomycin as triacetyloleandomycin) per cc.

More detailed professional information available on request.

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Of 5,057 patients with confirmed infections of all body systems... 4,731 or 93.5% were treated successfully with Signemycin®

Note:

The high rate of response to Signemycin in these cases is noteworthy because the totals include many patients with difficult-to-treat infections, many whose infections had proved resistant to other agents, and many who had been treatment failures on other therapy.[1-87] In addition the following criteria were used for the cases cited: (1) only published results were used (2) results were confirmed by clinical and/or laboratory findings (3) patients were cured, not "improved" (4) dosage conformed with current recommendations in the United States (5) no other anti-infective agents were used concomitantly (6) no instance of prophylactic use was included in these tabulations.

Condition	No. of Patients	No. Responded to Signemycin
Ear, nose and throat infections	507	465
Respiratory infections	1,028	954
Gastrointestinal infections	425	387
Genitourinary infections	748	684
Skin and soft-tissue infections	1,088	1,036
Bone and joint infections	71	64
Deep-seated or generalized infections	257	251
Obstetrical & gynecological infections	341	320
Miscellaneous conditions	592	570
Totals	5,057	4,731 (93.5%)

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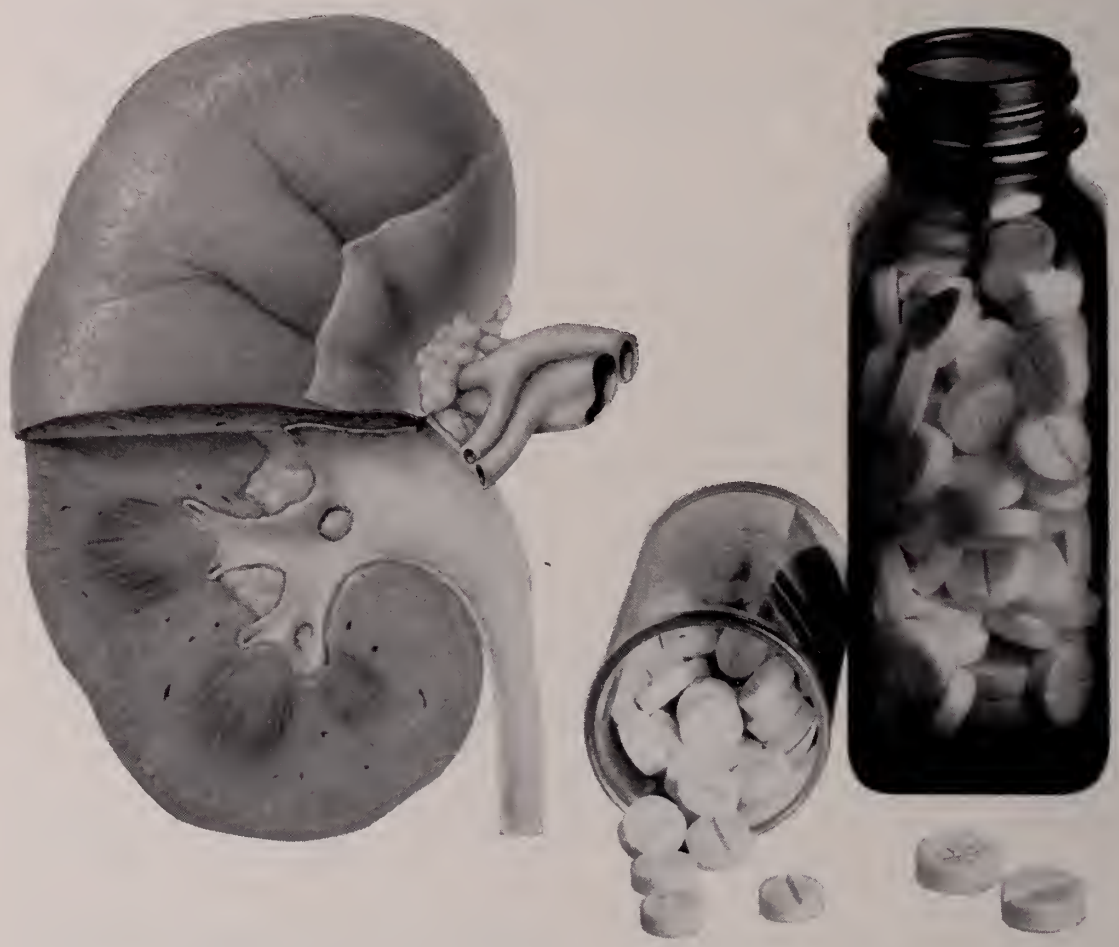

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The development of chlorothiazide and probenecid were events of major importance, but perhaps even more important for the future was the Renal Research Program by which they were developed. When Merck Sharp & Dohme organized this program in 1943, it was expressing in action some of its basic beliefs about research:

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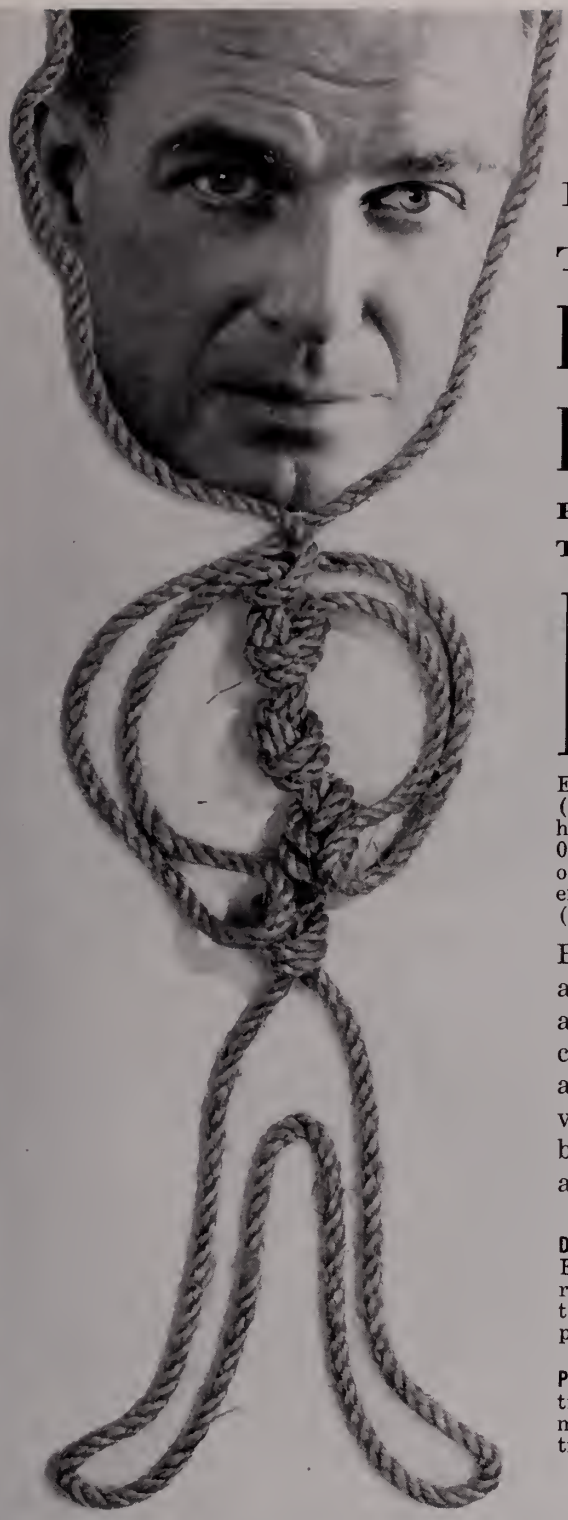

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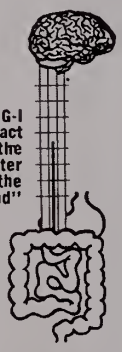
Belbarb calms both the agitated mind and visceral spasm by its combined sedative/antispasmodic action. Many physicians prescribe Belbarb in stress induced anxiety reactions, nervous tension states, visceral spasm, peptic ulcer, irritable bowel syndrome, urinary tract spasm, and hypertension.

DOSE: One Tablet or one tsp. Elixir 3 or 4 times daily, as required. Children ¼ to one tsp. 2 to 4 times daily, or as prescribed.

PRECAUTIONS: Do not use in patients with glaucoma or in males with prostatic hypertrophy.



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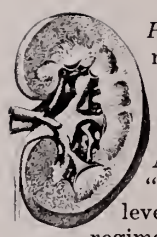

Proteus mirabilis is not only the most common cause of *Proteus* infections of the urinary tract, but such infections are often resistant to other antibiotics.[1-4] According to Anderson *et al.*,[5] "When assessed in terms of serum levels attainable with usual dosage regimens, ampicillin was the most effective drug tested against *E. coli* and *P. mirabilis*." These authors found *Klebsiella-Aerobacter* and *Pseudomonas* organisms relatively insusceptible to ampicillin. With its broad-spectrum coverage of many gram-positive and gram-negative bacteria, absence of toxicity, and slow emergence of resistant strains, PENBRITIN (ampicillin) is a most beneficial and safe drug in treating urinary tract infections—*killing* the pathogens, not just suppressing them.

Dosage: Adults—500 mg. every six hours (higher doses may be required for severe infections). Children—(under 13 years, whose weight will not result in a dosage higher than that recommended for adults) 100 mg./Kg./day in divided doses every six or eight hours for moderately severe infections; 200 mg./Kg./day in divided doses every six hours for severe infections.

Contraindications: (1) Hypersensitivity to penicillin. (2) Infections by penicillinase-producing staphylococci and other penicillinase-producing organisms. *Aerobacter aerogenes*, *Pseudomonas pyocyanea*, and *Proteus morganii* are resistant to PENBRITIN (ampicillin).

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Precautions: As with other antibiotics, precautions should be taken against gastrointestinal superinfection. To date, safety for use in pregnancy has not been established.

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References: 1. Hanson, R. J., *et al.*: J. Urol. *79*:1016 (July) 1958. 2. Middletown, J. E.: Brit. M. J. *ii*:497 (Aug. 31) 1957. 3. Today's Drugs, Brit. M. J. *i*:1475 (May 26) 1962. 4. Brumfitt, W., *et al.*: Lancet *i*:130 (Jan. 20) 1962. 5. Anderson, K. N., *et al.*: J.A.M.A. *187*:87 (Feb. 22) 1964.

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Developmental Aspects of Pyelonephritis

William B. Weil Jr., M.D.
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GAINESVILLE

Pyelonephritis has been recognized as an age and sex-linked disease process for many years. About 90 per cent of all cases occur in females. Four major peaks of incidence are recognized: one in the first months of life, a second during the period of toilet training from 18 months to three years, a third in women in the child-bearing period and a fourth in postmenopausal women.

Longcope and Winkenwerder[1] and Weiss and Parker[2] were among the first to speculate that there was a relation between these peak infection periods. They postulated that the seeds for the harvest of far advanced or terminal atrophic renal disease are sown early in life, in the form of unrecognized or inadequately treated episodes of acute pyelonephritis. Since this time, it has become almost axiomatic in medicine that the relationship postulated in 1933 indeed reflects the usual natural history of this disease (fig. 1).

Interest in the long range health implications of disease processes in early life has led to reexamination of this hypothesis to determine if after 30 years on the scene, it still reflects the natural history of pyelonephritis. From both morphologic[3] and epidemiologic points of view, there is a basis for considerable scepticism that this hypothesis applies to the majority of patients. No careful prospective studies of this disease since the availability of chemotherapy have verified the basic assumptions involved, and data[4] exist which suggest that such a course is an uncommon one at the present time.

This reassessment has lead to a further search for developmental factors which underlie urinary tract infections in early life and which might provide links between the recurring peaks of incidence.

The data to be presented imply that pyelonephritis in the young is a disease process with multiple variables contributing to its incidence, age and sex distributions, and to the probabilities of continuing infection or susceptibility in later life. They further suggest that the natural history suggested by the early workers reflects that of the exceptional case rather than accurately describing this complex disease for the majority of persons.

Clinical Aspects and Epidemiology

The changing clinical expression of proved urinary tract infection throughout early life is well known. Fevers of unknown origin, growth failure, dehydration, and azotemia represent a frequent pattern in the first year of life during which the preponderance of major genitourinary anomalies gain expression. Bladder outlet obstruction in both sexes, more frequently in males, is the most common lesion. High suspicion of an anomalous urinary tract should be paramount in the physician's approach to any urinary tract infection in an infant under one year of age.

A second pattern appears in the one to eight year old age group, mostly girls, in which systemic manifestations are frequent and often severe, with high fever, chills, abdominal pain, and gastrointestinal symptoms. Not infrequently the specific symptoms such as frequency, dysuria and urgency which suggest urinary tract disease in adults are absent in these circumstances. Careful examination of the urine is therefore an important diagnostic procedure in any febrile child. The contrast between this clinical pattern and that in adult women, who have a high frequency of blad-

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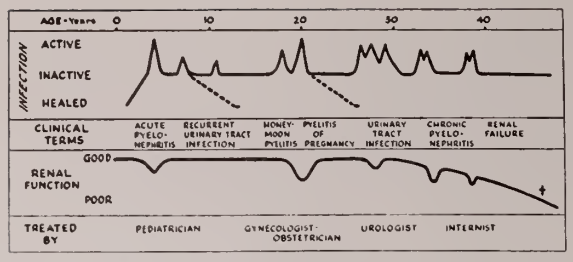

Life chart of a female patient with urinary tract infection.

Fig. 1. — The postulated natural history of pyelonephritis in women was first proposed by Longcope and Winkenwerder[1] in 1933 and represented by Jawetz,[26,29] in 1965. This hypothesis implies that there is a continuing link between the urinary tract infections of childhood, those occurring during pregnancy, and terminal atrophic renal disease. This link has been postulated to be based upon latent or continuing infection, or recurring infection in a functionally or anatomically abnormal urinary tract.

der and urethral symptoms, has lead to the assumption that the disease process is most frequently cystitis and urethritis in the adult and pyelonephritis in the female child. There is, however, a good basis for doubt that urinary tract infection in the women of the child-bearing ages is confined to the bladder and urethra.[5]

This general description of the clinical aspects of urinary tract infection would be consonant with the experience of the majority of general physicians, internists, and pediatricians. There are, however, no prospective or adequate retrospective studies which have shown that the majority of women with severe pyelonephritis had established urinary tract infection as children, or that a significant proportion of young girls with urinary infection are likely candidates for atrophic pyelonephritis at age 50. Moreover, there is very inadequate information which will accurately portray the incidence or prevalence of urinary tract infection throughout life.

Nearly every study from which age prevalence is imputed reflects a bias with respect to the general population. Outpatient clinic population,[6] hospitalized medical patients,[7] hospitalized children,[8,9] pediatric autopsies,[10] and pediatricians' practices,[11,12] have each purported to indicate age incidence and general frequency of urinary infection with quite variable results. The incidence of urinary tract infections in a pediatrician's urban practice in Florida is about 1 to 2 per cent of cases seen.[12]

One estimate of the age incidence of these infections is indicated by data in table 1, taken from another urban practice.[13]

A recent and important examination of the problem of the prevalence of urinary tract infection in the general population has been the South Carolina study of Kunin, Zacha and Paquin.[14] They surveyed over 6,000 school children (age 5 through 18), with over 90 per cent participation, by the technique of quantitative clean catch urine culture, and uncovered a 1 to 1.5 per cent incidence of persistent infection in girls in this age group (table 2). About one half of these girls were symptomatic. In the Newcastle-on-Tyne study,[15] the occurrence of urinary infection, based on pyuria, was only four cases in 846 children followed for the first five years of life. The discrepancy is striking and may largely represent differences in diagnostic definitions.

It seems probable, therefore, that 1.0 per cent represents the general order of prevalence of urinary tract infection in school age girls at any given time. The duration of these infections, however, and thus the cumulative proportion of girls who will have such infections over a period of time is not established. This last figure is of great importance in evaluation of the long range implication of urinary infection in early life, for no assessment of the over-all attack rate in childhood can be made without it.

The incidence and cumulative consequence of pyelonephritis in pregnancy are equally in doubt. Attempts to establish the incidence of pyelonephritis in adult females have centered upon surveys of the prevalence in the population of hospital wards or clinics. The prevalence in the population at large is unknown, and consequently the frequency in adult women with respect to frequency in the earlier period of life cannot be compared. Representative studies are summarized in table 3.

Retrospective studies of the outcome of urinary tract infection in girls present results which have the same bias as data on incidence and prevalence in the general population. In the early reports of such investigators as Wharton, Gray, and Guild,[16] it was implied that at least half the girls with one or more urinary tract infections would have some urinary abnormality 10 to 20 years later. More recent studies,[4] however, from the same hospital indicate that only 17 of 54 girls with one urinary infection had any evidence of disease five to 10 years later, and the renal disease was severe in only one of these. Thirteen of 22 girls who experienced two or more episodes of urinary infection had urologic abnormalities in

the same period. Furthermore, the group with a history of one urinary infection had had 16 pregnancies at the time of follow-up and only one of these was complicated by urinary infection. On the other hand, five of 10 pregnancies in girls who had had two or more urinary infections were complicated by an active pyelonephritis. These same authors questioned an additional 75 pregnant women who had "pyelitis of pregnancy" and only five gave a history of urinary infection in childhood.

In a later study by Burke[9] of 100 consecutive children with urinary infection, only 1 of 61 who had a single episode was found to have pyelonephritis 10 years later. Of 39 children with two or more infections when first seen, 10 had evidence of infection at the time of follow-up. Finally, in a 10 to 20 year followup of urinary infection at the Massachusetts General Hospital, Steele, Leadbetter and Crawford[8] reported that patients with no anatomic lesion initially, demonstrated no evidence of chronic advancing renal disease, but five of 25 had evidence of recurrent infection.

In summary, no studies of the incidence and age patterns of pyelonephritis reflect the natural history of this disease in the general population. It appears established that there is a peak involving both sexes in the first year of life; as this peak extends into the early years of childhood, it is comprised almost entirely of females. The very low incidence, however, usually assigned to the preadolescent and adolescent period is brought into serious question by the results of the Charlottesville study. The incidence of persistent bacteriuria was equally high in the upper and lower ranges of the school age children studied. In the child-bearing years a high incidence of urinary infection extends to age 40 through 50, when most advanced renal disease is observed.

A connection between these peaks of incidence cannot, however, be considered established by any data; this concept appears to be based upon the clinical impression of past generations of physicians, and merits careful re-examination at the present time.

The Etiologic Agents in Pyelonephritis

Regardless of age group, the chief etiologic agents of uncomplicated urinary infections are organisms of the stool flora; over 90 per cent are members of the coliform group (table 4). In frequently hospitalized or complicated cases, Proteus, Pseudomonas, and staphylococci are much more

Table 1. — Age Incidence of Pyelonephritis in Children

Age in Years	Number
0 - 1	19
1 - 2	5
2 - 3	13
3 - 4	19
4 - 5	18
5 - 6	7
6 - 7	7
7 - 8	3
8 - 9	2
9 - 10	5
10 - 11	3
11 - 12	1
12 - 13	1
13 - 14	1
14 - 15	2

These data,[13] taken from the urban private practice of a pediatrician, represent every child with proved first attack urinary tract infection seen over a five year period.

Table 2. — Incidence of Persistent Bacteriuria by Age in School Girls of Charlottesville, Virginia

(Kunin, Zacha and Paquin,[14] 1962)

Age Range	Number Tested	Number with Bacteriuria	Per Cent
5-9	1,970	14	0.7
10-14	2,172	27	0.5
15-19	858	15	1.7
20-24	132	2	1.5
Totals	5,132	58	1.1

Table 3. — Occurrence of Bacteriuria in Various Population Groups Surveyed at Boston City Hospital[6]

6% of 335 females in medical outpatient department
4% of 102 males in medical outpatient department
18% of 54 diabetic females in outpatient department
5% of 37 diabetic males in outpatient department
6% of 4,000 pregnant females making their first antepartum visit
98% of 100 patients with inlying catheters for 96 hours
2% of 350 patients, previously without bacteriuria, who underwent single catheterization
30% of 76 female patients on medical wards
12% of 82 male patients on medical wards
70% of 13 male patients on genitourinary ward

Table 4 — Incidence of Various Microorganisms in Uncomplicated Urinary Tract Infection

(Coleman and Taylor,[27] 1949)

Organism	Per Cent: 60 Uncomplicated Cases	Per Cent: 40 Complicated Cases
E. coli	82	18
Paracolon	5	5
Atypical E. coli	5	5
A. aerogenes	2	45
P. vulgaris	5	43
P. morganii	0	35
Ps. aeruginosa	0	7
Misc. rods	2	0
Enterococcus / Staphylococcus	18	25

frequently implicated and more likely to be antibiotic-resistant. The organisms, therefore, directly responsible for urinary infections do not appear to have developmental significance. Associated infections, however, may provide such a link. For example, a relation between virus respiratory infections and urinary tract infection has been postulated on the basis of overlapping seasonal incidence, frequency of associated symptoms, and age distribution of both entities. The conflict in data on this point is illustrated by one series in which 34 per cent of patients with urinary infection had an upper respiratory infection at the time of diagnosis, and another group in which only 1 per cent had respiratory symptoms associated with urinary infections.[13]

Primary viruria has been demonstrated regularly only with measles virus and salivary gland virus, rarely with enteroviruses and herpes viruses. Viruria in these circumstances is not usually associated with urinary tract symptoms. Since, however, certain virus infections, such as influenza and measles, may predispose to bacterial infection, it could be postulated that the "lowered resistance" from a variety of respiratory virus illnesses could permit otherwise innocuous contamination of the lower urinary tract to establish symptomatic infection. No known data on the complications of established respiratory virus infection such as measles suggest that this is a probable or frequent element in determining the age pattern of urinary tract infection.

Another frequent suggestion is that active early urinary infections are followed by latent existence of microorganisms in kidney tissue awaiting activation by the stresses of pregnancy and other factors. This postulate has basis in evidence that organisms of the coliform group may have prolonged intracellular life after ingestion by macrophages under certain conditions. Too, the hyperosmolarity characteristic of the renal medulla could conceivably provide an excellent milieu for the development of protoplast forms of certain microorganisms permitting prolonged survival in the tissue. This mechanism of latent infection might link the peaks of symptomatic incidence of pyelonephritis. Evidence, however, of latent pyelonephritis in the 10 to 20 year old age group in the absence of continuing active infection has not been demonstrated in clinical or autopsy material. An approach to the problem would be careful culturing of the kidneys of a large group of accidently killed persons in this age period—a type of material which the highways of Florida are providing with increasing frequency.

Host Factors in Pyelonephritis

General Defense Mechanisms.—In the literature on pyelonephritis in childhood the statement has been made frequently that infants and children have an increased susceptibility to urinary infection because of defective local tissue resistance or because of "delicate" structures which resist infection poorly. It is now possible to define with somewhat greater accuracy the status of general immunologic defenses in the growing child.

It has been established that phagocytosis by polymorphonuclear leukocytes and monocytes in the one to five year range does not differ in any known way from that of the older person. This age group shows no general susceptibility to infection by gram-negative bacilli other than in the urinary tract. Effective phagocytosis and killing of gram-negative organisms requires opsonic antibodies which change with age and complement (fig. 2). It is conceivable, therefore, that in some children a deficiency of certain specific opsonins could account for inadequate defenses against the initial phase of urinary tract infection. Since, however, the antibodies involved, primarily macroglobulins, can be formed very rapidly by even the smallest infant, it seems doubtful that a defect in immunological defenses could play a major role in a changing resistance to urinary tract infections.

Among the unknowns which require further study is the role of certain bacteriostatic substances in the urine. Nothing is known concerning the age at which these substances appear or quantitative or qualitative variations with age, sex, or coexisting disease processes. Since fragments of gamma globulin carrying specific activity are secreted into the urine, they could conceivably have a role in preparing organisms for phagocytosis before these organisms gain access to the tissues of the urinary tract. Another line of investigation would concern the role of gamma globulin secretion, in the form of gamma-1_A globulin, around the outlet of the bladder and in the urethra and adjacent areas. This is the principal secretory form of gamma globulin in the saliva, tears, and gastrointestinal secretions and appears to provide a first line of specific defense. It is, therefore, conceivable that a comparable defense against urinary infection could be age-linked and a factor in establishing the susceptibility of the young female to urinary tract infection. In sum-

mary, no specific defects in general or specific immunological defense mechanisms have yet been established which would explain the characteristic occurrence of these infections in young females with a peak in the one to three year age range.

Developmental Anatomy of the Urinary Tract.—A prime focus of attention in attempting to understand the factors involved in the incidence of urinary infections in young girls has been the normal developmental changes in the anatomy of the urinary tract and the high incidence of gross and subtle anomalies there. Although data are not entirely satisfactory, some aspects of urinary tract development may be related to the high incidence in young females.

The urethra in the young female is short, approximately 1.5 cm. in length at birth, and opens by a direct route into the bladder. As the bladder descends into the pelvis with age the urethra elongates and develops an angulation at the outlet. By puberty the urethra is about 3 cm. in length. Coincident with this increase in length, periurethral glandular development occurs, although the timing of this aspect of urethral development has not been defined in detail.

The developmental anatomy of the urinary tract offers multiple possibilities for anomalies in both the upper and lower urinary systems. It is estimated that 30 per cent of all congenital defects involve the urinary tract. These defects range from obstruction of the outlet due to meatal stenosis, posterior urethral valves and other forms of bladder neck obstruction, to anomalies in the ureterovesical junction, duplication of the ureters, a variety of errors in the position and structure of the kidneys plus dysplastic and other intrarenal abnormalities. The variety of defects which are possible has been reviewed adequately elsewhere.[17]

The high incidence of urinary tract infections in the first year of life frequently represents the manifestations of the major congenital anomalies which involve the system. Since these anomalies are more common in males than in females, there is a predominance of males with urinary infection at this time of life.

In the past 10 years great emphasis has been placed on the role of reflux through an incompetent ureterovesical junction in the genesis of pyelonephritis in girls. Considerable controversy exists concerning whether reflux predisposes to infection or whether infection and the resultant

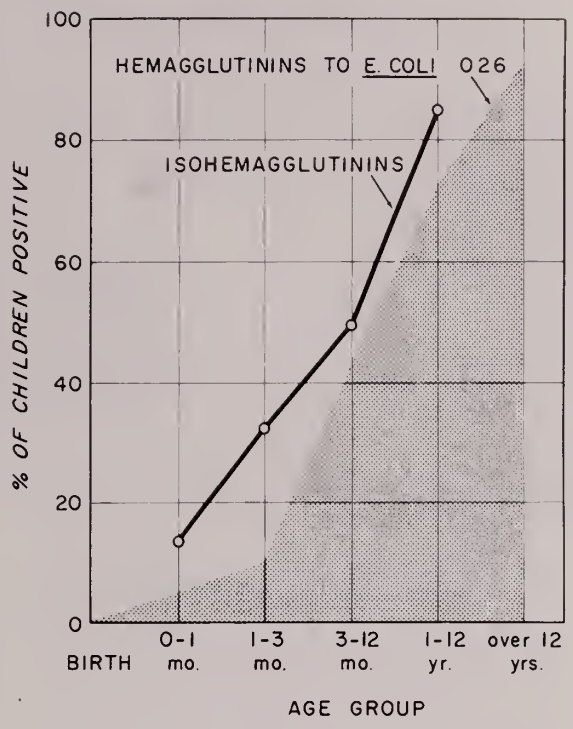

Figure 2

edema predispose to reflux.[18-20] One of the important results of this emphasis and the questions raised has been a more careful look at the developmental anatomy and some of the more subtle anomalies of the ureterovesical junction.

The descent of the bladder into the pelvis is associated not only with the lengthening and angulation of the urethra but also with the changes in the position of the trigone and increasing length of the intravesical segment of the ureters. Table 5 shows the growth in length of the intravesical portion of the ureter as related to age. This increasing length of the intravesical portion is a factor which has led several authorities to postulate that the short ureterovesical junction in young girls produces increased susceptibility to reflux.

The incidence of reflux through the ureterovesical junction in normal persons is a highly controversial subject. In a study by Forsythe and Whelan[21] 445 children were investigated using voiding cinecystourethrograms. Most of these children were seen because of enuresis. Thirty of this group had ureterovesical reflux without infection or any other abnormality. Other studies dispute the interpretation that this is a normal finding.[22] More recent cineradiographic studies of voiding appear to show that in normal children the incidence of reflux is probably 1 per cent or

Table 5. — Changes in Length of Intravesical Ureters With Age

(Hutch,[28] 1961)

Age Group	Numbers of Ureters Examined	Average Length (cm.)
Premature	4	0.2
Newborn	6	0.5
1 yr.	2	0.7
2 yr.	2	0.6
6 yr.	2	0.85
10 yr.	2	1.15
12 yr.	1	1.0
19 yr.	2	1.45
21 yr.	14	1.3

less. The difference in these studies is probably largely based on selection of patient material for a study in normals.

It has also been shown[23] that congenital defects in the continuation of the longitudinal muscle into the bladder can result in a relative incompetence of the ureterovesical valve mechanism. Other anomalies of displacement of the ureterovesical junction may result in incompetence and in reflux.

The role of the maturation of the ureterovesical junction and of anomalies in this area have both been implicated in explaining the occurrence of urinary infection in young females. It is postulated that the poor hygiene of the diaper period gives an increased incidence of contamination of the bladder through a short urethra. When frequent contamination of the bladder by bowel flora is associated with developmental or other structural anomalies of the ureterovesical junction, or when cystitis results in inflammation and edema around the ureterovesical junction and consequent incompetence of the valve mechanism, then reflux of the infected urine will occur, producing an ascending infection and full-blown pyelonephritis. The weaknesses in this hypothesis are that it has not been adequately demonstrated that bladder contamination is a regular feature of this age period and that only a small proportion of normal females have been shown to have reflux through the ureterovesical junction. This remains, however, as one of the most reasonable explanations for the high incidence in young females.

Renal Aspects of Pyelonephritis.—One of the interesting recent developments in understanding pyelonephritis has been experimental demonstration that the renal medulla is much more susceptible to infection by the hematogenous and ureteral route than is the cortex of the kidney. It is well known on the basis of clinical and pathological data that the most frequent site of serious pathology in pyelonephritis is the renal medulla and particularly the renal papillae. These clinical observations are reproduced in almost all experimental models which have been studied. The basis for the medullary localization of infection has not been established clearly, but some facts are known which may explain in part the susceptibility of this portion of the kidney to infection.

The tubules of the collecting system, formerly thought to be relatively inactive physiologically, are now known to have a prime role in water removal. The medullary region of the kidney is therefore very hypertonic with respect to other body fluids. This increased osmolarity is associated with an increase in sodium ion concentration, increased urea concentration, and increased albumin concentration. This region of the kidney is also the major site for ammonia production. It has been shown that hyperosmolarity increases the susceptibility to infection with enterococci.[24] Ammonia production in the renal medulla appears to be sufficient in quantity to inactivate the C′4 component of complement and thus conceivably interfere with the normal processes of phagocytosis and local defense against infection.[25] It is also known that potassium deficiency and hypercalcemia produce primary damage in this region of the kidney. In summary, a number of metabolic features of the renal medulla may conceivably increase its susceptibility to infection with a variety of microorganisms.

Certain developmental changes may conceivably relate these renal variables to susceptibility of the young child to pyelonephritis. Because of the high metabolic rate of small children on a weight basis and the consequent rapid fluid turnover, children are known to be more susceptible to rapid dehydration and to acidosis than older persons. Accordingly, the features which predispose to infection in the renal medulla could develop more rapidly, more frequently and become more severe in the young child than in the older person. These developmental changes could thereby play a role in the pattern of disease in pyelonephritis. No experimental data, however, relate changes in osmolarity of the renal medulla or change in ammonia production with age and with various degrees of experimental dehydration. This remains a fertile area for further investigation.

Table 6. — Relation of Symptoms to Urologic Findings in 62 School Children With Persistent Bacteriuria, Charlottesville Study

(Kunin, Zacha and Paquin,[11] 1962)

Category	Number Positive	Number with Abnormal IVP	Number with Abnormal Cystogram
Recent history of symptoms	27 (43%)	6 (22%)	11 (41%)
Past history of infection	13 (21%)	4 (31%)	6 (46%)
Pyuria present	23 (37%)	7 (30%)	9 (39%)
Totals		13 (21%)	28 (45%)

Table 7. — Urologic Findings in 64 School Children Having Persistent Bacteriuria Charlottesville, Va.

(Kunin, Zacha and Pagain,[11] 1962)

IVP Findings		Cystogram Findings	
Caliectasis	10	Reflux	15
Hydronephrosis	2	Trabeculation	8
Unilaterally		Large bladder	6
abnormal kidney	2	Megacystic syndrome	6
Totals	14 (22%)		28 (44%)

Pathogenesis, a Summary of Multiple Variables

A discussion of pathogenesis of pyelonephritis must at this time be confined to the relation of multiple variables which could conceivably contribute to the pattern of illness and the age incidence. Among these variables are the host defenses, including anatomical changes and developmental changes in the circumstances and function of the various elements of the urinary tract; the type of microorganisms involved; and the presence or absence of other illness. In most instances the occurrence of pyelonephritis at any age will represent a concatenation of the several variables in a single individual at a given time to produce the clinical disorder.

It seems possible, even probable, that these factors may combine in an occasional person in a way which lays the ground work in a young child for future and perhaps fatal pyelonephritis in adult life. We would suggest, however, that the classical pattern postulated by Longcope and Winkenwerder[1] does not represent the average sequence of events in pyelonephritis. Most children with pyelonephritis get well after a single attack; many children get well after more than one attack. A small group with undetected anomalies of the urinary tract and a few with no anomalies but recurrent or continuing infection will go on into adult life with urinary tract disease. At the other end of the spectrum, it is clear that most adults with chronic pyelonephritis do not have an established history of this disease in early life. Whether these patients represent the less than 1 per cent who have asymptomatic infection in surveys or who have incompetence of the ureterovesical junction remains to be established. There is obviously great need for longitudinal prospective studies of this important disease in all ages.

Clinical Implications of the Developmental Pathology of Pyelonephritis

The known data have several implications for the physician. In dealing with pyelonephritis in very early life, the physician should always be aware that a high proportion of such infants will have major urinary tract anomalies which will require correction before infection can be permanently irradicated. Some of these anomalies will be major and easily found, others will be subtle requiring careful urologic evaluation. It is still a good rule of thumb that all urinary infections in children less than one year of age, and in male children at any age, be investigated in terms of congenital abnormality of the urinary tract.

The probabilities of a female child beyond the first year of life having a congenital abnormality are much less. There is, however, a group of relatively subtle anomalies of the ureterovesical junction and of the bladder neck which have not been emphasized previously. These should enter the

diagnostic considerations of the physician dealing with the young female with repeated attacks of pyelonephritis or who does not respond to adequate treatment.

Table 6 illustrates the relationship between bacteriuria, symptoms and abnormal findings in the children examined by Kunin, Zacha and Paquin.[11] It is of interest that almost half of this group had some structural abnormality and that these were more often found by cystography than by intravenous pyelography. This is further amplified in table 7.

The period of therapy of acute pyelonephritis must be of a length which insures that the infection is eradicated. Drug treatment should be followed by a prolonged period of observation in every child to ascertain that the infection has been cleared.

The general management of the child with acute urinary tract infection depends, primarily, upon an understanding of the particular vulnerability of the medullary portion of the kidney to infection. Decreasing the osmolarity and acidity in the renal medulla can be best accomplished by adequate fluid therapy, with emphasis on a high water intake during the acute disease process and prevention of acidosis.

Summary

A search for developmental factors which determine the age pattern and the natural history of a disease process inevitably brings out that multiple variables determine incidence in age groups, prevalence in populations, and the course of the disease in individual patients. Pyelonephritis appears to be determined by such multiple variables. No single factor in the host or organism determines the pathogenesis of pyelonephritis in a given patient. The most fertile direction for study of this disorder which might lead hopefully to prevention rests in identification at the earliest possible age of subtle developmental changes which are increasingly susceptible to control by medical and surgical means. This avenue offers the most hopeful prospect for prevention of serious pyelonephritis in the women who will be of child-bearing age in 1985.

References are available from the authors upon request.

University of Florida College of Medicine.

Hashimoto's Thyroiditis

Report of Case in a Child

Sorrell L. Wolfson, M.D.*
and Lawrence Kahana, M.D.
TAMPA

Hashimoto's thyroiditis or struma lymphomatosa was first described as a clinical entity over 50 years ago.[1] Since that time, many articles have been published on this disease; however, most have been written about adults.[2,3] Although some workers[4] think that it is an autoimmune disease determined by a genetic predisposition, the pathogenesis of this disease remains unknown. Other authors[5-7] have noted a relationship between Hashimoto's disease and "collagen diseases." The age range is from four months to 80 years with the highest incidence in the fourth and fifth decades. The peak age onset of this disease in children is 10 to 15 years and roughly 50 per cent of the cases occur during the preadolescent or adolescent stage of development.[2,4,8] Many more females than males are affected by this disease (14 females to one male). One author[9] found only three cases of Hashimoto's struma between 1937 and 1957 at The Johns Hopkins Endocrine Clinic and stated that this disease is very rare during childhood.

The purpose of this paper is to present a case of Hashimoto's thyroiditis in a seven year old girl, outlining the symptoms, signs and laboratory findings of this disease, and to focus attention on a

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disease entity that may be more common in children than is apparently realized.

Report of Case

The patient was born at term on May 28, 1956. The birth weight was 2,724 Gm. Both parents and two siblings were living and well. There was no history of thyroid disease in this family.

This seven year old white girl was admitted to Tampa General Hospital with a painless, nontender, enlarged thyroid gland of two weeks' duration. It was noted that the enlargement of the thyroid occurred two weeks following an upper respiratory tract infection and tonsillitis. She was very nervous and irritable, but had no difficulty in swallowing or speaking. She exhibited no symptoms of either hyperthyroidism or hypothyroidism.

Physical Examination.—Her weight was 20 Kg. (below the 3 percentile for age) and her height was 120 cm. (20 percentile for age). The remainder of the physical examination was unremarkable except for the presence of a very firm, diffusely enlarged, nontender thyroid gland. No nodules were palpated and bruit could be heard.

Laboratory Findings. — The protein bound iodine (PBI) was 6.7 micrograms % and the butanol extractable iodine (BEI) 4.5 micrograms %. With commonly employed alkaline ashing technique, the concentration of BEI normally is approximately 0.6 micrograms % less than the concentration of PBI. Twenty-four hour I^{131} uptake was 58 per cent (within normal limits). The triiodoythyronine (T_3) suppression test, described by Werner,[10] was made, giving orally 125 micrograms of T_3 per day for eight days and the repeat I^{131} uptake on the eighth day was 5 per cent. Normal is 40 to 50 per cent or greater reduction in I^{131} uptake after T_3. The serum by Coons fluorescein technique was positive for the presence of complement-fixing and agglutinating antibodies. The test was performed by Robert M. Blizzard, M.D., Pediatric Endocrinologist, The Johns Hopkins Hospital, Baltimore. The sedimentation rate, complete blood count and urinalysis were all within normal limits. Thymol and zinc sulfate turbidity and total serum protein albumin-globulin ratio were unremarkable. Skull x-rays were negative and the bone age was approximately six years.

Open biopsy of the thyroid gland was performed and microscopically the thyroid gland showed marked lymphocytic infiltration throughout the gland and between the follicles. There was secondary lymphoid follicle formation and oxyphilic changes were demonstrated in the epithelium of the thyroid follicles. No fibrosis was noted. These changes are diagnostic of Hashimoto's disease.

When the patient was discharged after two and one-half weeks' hospitalization, she was receiving 2 grains of desiccated thyroid per day. Following thyroid therapy the goiter completely regressed within two months.

Comment

Hashimoto's thyroiditis is a cause of simple goiters in children. The diagnosis is suggested by the presence of a goiter which is painless, firm, nontender and usually diffusely enlarged with ridged surface, without symptoms or signs of either hyperthyroidism or hypothyroidism.

The patient in the case reported was smaller than normal for her age in both height and weight. Ancillary laboratory findings of a discrepancy of more than 2 micrograms % between PBI and BEI is common and has been previously reported.[1,11] PBI, BEI, I^{131} uptake and Werner T_3 suppression tests are all usually within normal limits. The presence of thyroid antibodies to thyroglobulin was demonstrated by the Coons technique and this has been demonstrated by other investigators using different methodologies.[4] Open biopsy of the thyroid gland should be performed to confirm the diagnosis by microscopically observing the lymphocytic infiltration, fibrosis and oxyphilic changes in the epithelium of the thyroid follicles.

The usual treatment of struma lymphomatosa is suppression of thyroid-stimulating hormone by desiccated thyroid, 2 to 3 grains per day. The child should be maintained on this drug for life. If the thyroid does not regress on thyroid therapy, thyroid biopsy should be performed because of the possibility of malignant neoplasms, and then thyroid replacement therapy should be continued.

Summary

Hashimoto's disease may be a common cause of nontoxic goiter in childhood.

The diagnosis is suggested by finding a painless, nontender, diffusely enlarged thyroid in a young preadolescent girl without signs of either hyperthyroidism or hypothyroidism. Laboratory data usually show a normal PBI and BEI but a marked discrepancy between the PBI and BEI (PBI 2 micrograms % or greater than the BEI), a normal I^{131} uptake with greater than 50 per cent reduction of I^{131} uptake after T_3 suppression, and the presence of agglutinating and precipitating antibodies to thyroglobulin. The diagnosis may be confirmed if biopsy is performed by the presence of typical changes of Hashimoto's struma microscopically.

The pathogenesis and mode of inheritance of this disease have not been elucidated.

Treatment should consist of 2 to 3 grains of desiccated thyroid daily and should be continued for life. If the thyroid gland fails to regress on thyroid therapy, biopsy should be performed to exclude malignant disease. If biopsy of the gland microscopically reveals adenocarcinoma or lymphosarcoma, surgical excision followed by thyroid replacement therapy is recommended.

References may be obtained from the authors upon request.

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Pneumomediastinum as a Complication of Acute Bronchial Asthma

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Pneumomediastinum is either a very rare complication of asthma or it is a commonly overlooked complication. Payne and Geppert[1] in 1961 reported on 32 cases from the literature. McGovern and others[2] also in 1961 found 20 cases reported in children and added four cases. This report adds one case and reviews the mechanism, the importance, the diagnosis, and the treatments.

Report of Case

A 16 year old male was seen in the emergency room at Variety Children's Hospital two days before Christmas, 1963, with acute asthma. This young man had had asthma since the age of two years. Over the years, he had no definitive treatment, but had been treated with medication for relief of symptoms and with steroids. It appeared that his growth had been retarded by the treatment with steroids. He had had skin tests and treatment with elimination of allergens and hyposensitization beginning about eight months before his present attack. Treatment had been successful enough to permit the discontinuance of steroid therapy. His present severe attack had been precipitated by the introduction of a Christmas tree into his home, and by his indulgence in holiday foods which he could not tolerate.

Physical examination was normal except for the usual profuse wheezing and suprasternal retraction. In addition, he complained of severe substernal and back pain.

Treatment with repeated small doses of epinephrine and inhalation of isoproterenol (Isuprel) and Alevaire in the emergency room of the hospital provided no significant relief. He was then admitted to the hospital.

Laboratory examination revealed a normal complete blood count and urinalysis. Chest radiography disclosed air in the mediastinum and in the subcutaneous tissues of the neck. In addition, the lung fields appeared hyperaerated.

Intravenous fluid containing aminophylline and steroids were added to the treatment. The patient was more comfortable without oxygen, and this was omitted from treatment. The respiratory distress, however, persisted for many hours. Sedation was limited to a small dose of meprobamate, and relief of pain was managed with salicylate. Blood pressure, pulse, and respirations were recorded frequently.

In about 12 hours, respiration was much easier and crepitation was felt in the tissues of the neck for the first time. The patient was free of symptoms in about 24 hours.

Discussion

Chapman[4] stated: "Spontaneous pneumomediastinum is said to occur in young males who previously have been in excellent health. The onset is sudden, usually with severe pain retrosternally, and often with radiation into the neck, shoulders, or arms, so that coronary occlusion stands high in the differential diagnosis. The direct diagnosis depends upon the discovery of Hamman's sign, (a to-and-fro crunching, clicking, or tapping audible over the precordium) and which is said to be audible in some patients only when they are placed in certain positions. Since small left pneumothoraxes alone may produce a crunch, indistinguishable from Hamman's sign, conclusive proof of pneumomediastinum depends upon the elicitation of the crunch in the absence

Fig. 1. — Note the shadow of diminished density about the cardiac silhouette extending up the mediastinal area. Note also areas of subcutaneous emphysema in both supraclavicular and infraclavicular areas.

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of a pneumothorax or upon the absolute demonstration of mediastinal gas by roentgenogram."

Head[3] commented: "Tension emphysema of the mediastinum is particularly important because it threatens life and demands emergency treatment. As the pressure rises, the great veins are collapsed, and the return of blood to the right side of the heart is so compromised that death from circulatory failure may ensue in a few minutes. The superficial veins become engorged, the pulse becomes rapid and soft, and the blood pressure falls rapidly."

Both the McGovern and the Payne groups, however, concluded that as a complication of asthma, the situation rarely, if ever, becomes as desperate as in the case described. All seem to be in agreement that increased pressure forces air through alveolar walls into the perivascular sheaths. Then dissection up the perivascular sheaths into the mediastinum occurs. From the mediastinum, it migrates into the subcutaneous tissues.

The patient usually complains of substernal pain. After a few hours, crepitation will probably be felt in the neck.

Generally conservative treatment with careful observation seems to be successful. Recovery is usually uneventful. A rising and weakening pulse and a falling blood pressure may, however, be indications for surgical intervention. This is aimed at relieving the pressure by permitting the air to escape from the mediastinum. Incisions are made in the supraclavicular fossae posterior to the sternomastoid muscles, and the suprasternal notch.

Fig. 2. — Note evidence of mediastinal emphysema particularly in the paraesophageal area where air is seen dissecting up the mediastinal plane.

Summary

A case of pneumomediastinum is reported. This is a rare and usually benign complication of acute asthma, although it may be a cause of sudden, unexplained death.

The mechanism, symptoms, diagnosis, and treatment are discussed.

References

1. Payne, T. W., and Geppert, L. J.: Mediastinal and Subcutaneous Emphysema Complicating Bronchial Asthma in a Nine Year Old Male, J. Allergy 32:135-138 (Mar.-Apr.) 1961.
2. McGovern, J. P., and others: Pneumomediastinum and Subcutaneous Emphysema Complicating Bronchial Asthma in Children; A Report of Four Cases, Ann. Allergy 19:1139-1145 (Oct.) 1961.
3. Christopher, Frederick: A Textbook of Surgery, Philadelphia, The W. B. Saunders Company, 1949, p. 907.
4. Harrison, T. R., and others, editors: Principles of Internal Medicine, Philadelphia, The Blakiston Company, 1950, p. 1396.

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Toxic Reactions to Local Anesthetics

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Two cases are described in which the patients had potentially lethal reactions to local anesthetics.

Report of Cases

Case 1. — A 62 year old man in good condition was admitted to the operating room for fasciotomy of the left hand. The procedure was to be carried out under a supraclavicular brachial plexus block with 1.5 per cent lidocaine (Xylocaine) with 1:200,000 epinephrine. After placing the needle into the brachial plexus, an attempt was made to aspirate from the needle, but no fluid or blood was obtained. Consequently, 15 ml. of the anesthetic solution was injected. After the injection, the patient gestured and stated that he felt numbness on the opposite side,* and that he was "feeling funny." Immediately afterward, he lost consciousness and no blood pressure, pulse, or heart beat was detectable. Artificial ventilation with oxygen was immediately started and an orotracheal tube was inserted under direct vision. After intubation, closed cardiac massage was begun and 25 mg. of ephedrine was given intravenously. An electrocardiogram was obtained, the tracing showing a regular rhythm. Cardiac massage was stopped. By this time, a good blood pressure and pulse rate had returned and the patient was observed for 30 minutes until he regained consciousness. He was then removed to the intensive care area where he made an uneventful recovery.

In the early postoperative period, there was some question about the electrocardiogram, which was suggestive of a posterior wall injury. Because of the cardiac massage, however, some doubt remained as to whether or not this patient had indeed suffered an infarct. The electrocardiogram gradually improved and the patient was discharged from the hospital within a few days in excellent condition.

Case 2. — A 20 year old, healthy woman was brought to the operating room for the excision of a rectal fissure. The operation was to be performed under epidural anesthesia. The anesthetic chosen was 2 per cent lidocaine (Xylocaine) with 1:200,000 epinephrine. The patient was placed in a prone position, slightly jackknife, and a 20 gauge spinal needle was inserted into the caudal canal. On aspiration, no spinal fluid or blood was obtained. Ten milliliters of the anesthetic solution was injected and during the preparation for a second injection, the patient suddenly lapsed into unconsciousness and had a grand mal seizure. She was immediately turned from the prone to the supine position and artificial ventilation with oxygen was begun. Despite the continuing convulsions, the exchange of air was good. In order to stop the convulsions, 2.5 per cent methohexital (Brevital) was given intravenously. After injection of 100 mg. of this substance, the tonic and clonic movements ceased. It was now possible to check the systolic pressure which had fallen from a control value of 120 to 70 mm Hg, but which returned to control levels spontaneously.

Discussion

These two potentially lethal complications of local anesthesia occurred in patients who did not have a history of adverse reactions to local anesthesia, who were not debilitated from disease or age, and who are alive today because, so we believe, they were treated quickly and energetically.

Reactions to local anesthetics are far more common than is frequently assumed. In the majority of cases, these reactions are mild and transient in nature, and are probably overlooked by the attending physician.

There is no general agreement as to the mechanism by which local anesthetics exert their toxic effect. The most frequently observed side effect of local anesthetics is a central nervous system depression, which may result in a brief sedation or even loss of consciousness from which the majority of persons awaken without having suffered any harm. This sedative effect of local anesthetics is so pronounced that intravenous injections of procaine have been used by French and his associates[1] to combat convulsions. These authors gave up to 3.5 mg./kg. of procaine intravenously to a patient in status epilepticus.

The effects on the central nervous system may be profound and result in muscular flaccidity, and respiratory and vasomotor depression. In addition to the central effects, local anesthetics depress the myocardium and the combination of central nervous system depression and direct toxic effects on the heart may produce cardiovascular collapse as seen in the patient in case 1 reported here.

Treatment

Treatment of central nervous system depression is directed toward the maintenance of adequate respiration and circulation. Artificially assisted respiration with oxygen must be instituted at the first indication of impending reaction to local anesthesia.[2] Central stimulants such as nikethamide (Coramine) or picrotoxin are of no use and may be harmful.

Treatment of the central vasomotor depression is by means of sympathomimetic agents given intravenously either in single doses or as a continuous drip. A slight head-down position of no more than 10 per cent is beneficial to increase the venous return to the heart, and thereby improve cardiac output and blood supply to the

*Possibility of undetected subarachnoid injection was considered for case 1. The reaction, however, was typical for massive cardiovascular collapse due to toxic dose of local anesthesia.

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vital centers of the medulla and the brain. The administration of intravenous fluids such as Ringer's lactate solution or normal saline is also advisable because it will tend to maintain adequate vascular filling.

If cardiac arrest has occurred, external cardiac massage is mandatory, in addition to artificial ventilation without which cardiac massage, of course, would be of no benefit. While this therapy is in progress, an electrocardiogram should be obtained in order to decide whether electric defibrillation is necessary in the instances where ventricular fibrillation, rather than cardiac standstill, is the underlying cause for the absence of pulse and blood pressure.

The vasopressor agents which we use are usually epinephrine or norepinephrine (Levophed). One must remember that these drugs should never be used without previous dilution because they are contained in most ampules in a strong concentration. Epinephrine, for instance, is commonly packaged in a concentration of 1:1000, which in itself, when given undiluted may cause ventricular fibrillation. Epinephrine and norepinephrine should be administered in dilutions of 1:100,000 and even then, 1 to 10 ml. given intravenously will frequently suffice. One should also remember that these agents and calcium chloride should never be used in the presence of a cyanotic heart, as they may elicit ventricular fibrillation when given to a hypoxic myocardium.

While the initial response to local anesthetics may be one of central nervous system depression, the response to larger doses is one of excitation. In some patients, excitation develops without previous depression. The typical clinical appearance is that of apprehension. The patient feels that all is not well and becomes talkative, nervous and restless; he exhibits choreiform movements, has tremors and begins to twitch. Particularly, these twitching motions may occur around the mouth and on the forehead. Eventually, grand mal seizures may supervene. During the seizure, respiratory exchange ceases because the muscles of ventilation participate in the clonic or tonic contractions. With the seizure, a

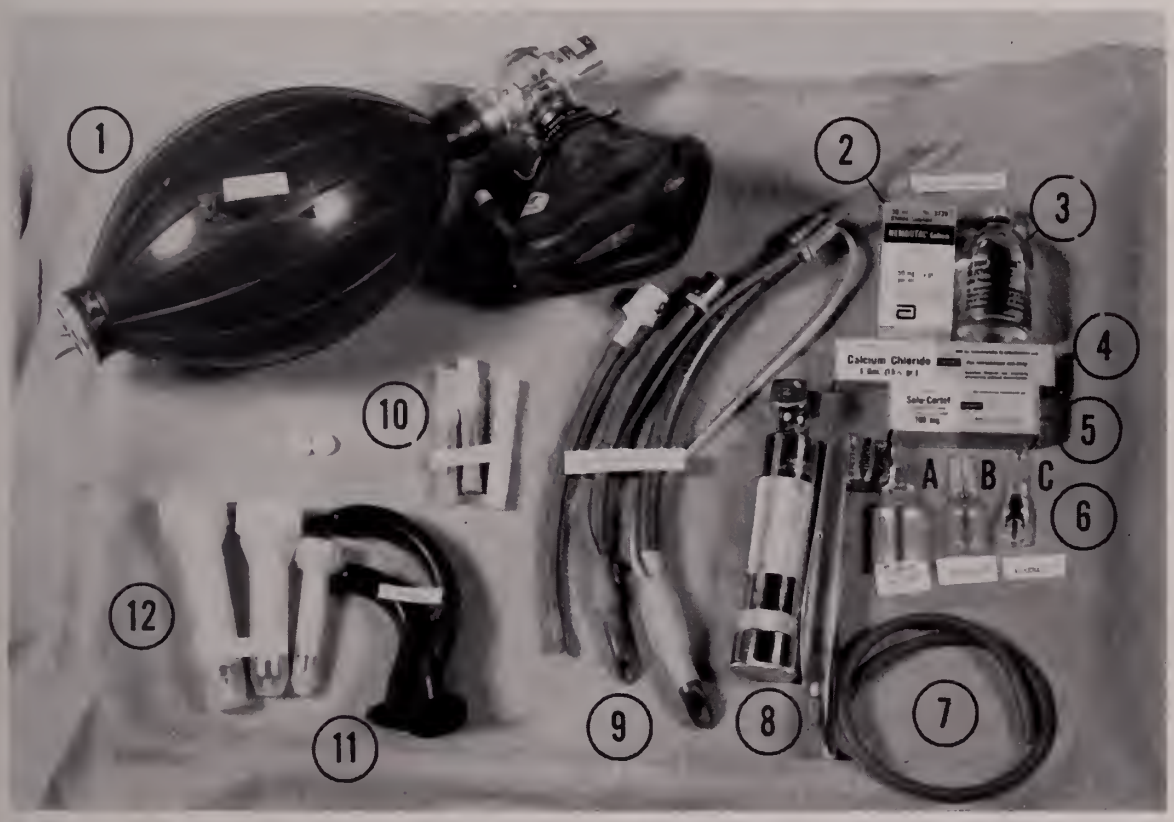

Fig. 1. — Emergency tray available whenever local anesthetics are used. 1. Ambu. 2. Sodium pentobarbital (Nembutal). 3. Normal saline. 4. Calcium chloride. 5. Hydrocortisone sodium succinate (Solu-Cortef). 6. a. Norepinephrine (Levophed), b. Ephedrine, c. Epinephrine. 7. Tourniquet. 8. Laryngoscope. 9. Endotracheal tubes. 10. Needles. 11. Airways. 12. Syringes. Aspirin.

strong sympathetic response occurs with a steep rise of catecholamines in plasma, hypertension and tachycardia. The maximally stimulated heart is thus exceedingly sensitive to hypoxia which invariably develops if the seizures are not controlled. Cardiac arrhythmias and eventually cardiac fibrillation ensue.

The treatment of this central nervous system stimulation is symptomatic and consists of artificial ventilation with oxygen, depression of the central nervous system with fast-acting intravenous barbiturates, and when the reaction occurs in a well equipped operating room, the use of short-acting muscle relaxants to block the motor manifestations of the seizures. The hazard of the use of intravenous barbiturates is that these agents have cardiovascular depressant effects in their own right and that these depressant actions may be superimposed upon the depressant actions of the local anesthetic on the heart and that the combination of these two effects may result in cardiovascular failure. We believe that in our second patient, the hypotension seen after the seizure was based on this combination of depression by a barbiturate and local anesthetic on the heart.

Complications such as the ones reported here can be successfully treated only if the physician is prepared to begin an immediate and meaningful therapy of the toxic reaction. It is, therefore, our policy that no matter how minor the procedure, a setup for emergency treatment be readily available. It is not sufficient to have such equipment in the house, on the floor, or in the next room. It has to be ready next to the patient. The following equipment should always be on hand and assembled when local anesthetics are in use:

1. Means of ventilating the patient (anesthesia machine or bag and mask, for instance, the Ambu).
2. Oropharyngeal airways.
3. Laryngoscope with a blade appropriate for the patient's size and with endotracheal tubes.
4. Barbiturates for intravenous use.
5. Vasopressor agents, such as epinephrine and norepinephrine.
6. Calcium chloride to increase myocardial contractile force.

In figure 1, a picture of our tray is shown.

The prevention of toxic reactions includes the use of the least amount of local anesthetics adequate for the anesthesia to be accomplished, the use of epinephrine together with the local anesthetic in a concentration of not more than 1:200,000 in an attempt to delay the absorption of the local anesthetic and the observation of certain maximum dosages. These are difficult to state and may vary widely. We recommend in our hospital that the following dosages are not exceeded in a single administration to the average adult patient: Procaine, 1 Gm.; lidocaine, 400 mg.; mepivacaine, 400 mg.; tetracaine, 100 mg.; dibucaine, 100 mg. The forementioned doses are the upper limits when epinephrine 1:200,000 is added. Without epinephrine, the doses have to be decreased.

Application of topical anesthesia for bronchoscopy and cystoscopic examinations with tetracaine (Pontocaine) and cocaine have been widely used. The maximal permissible dose for topical applications of cocaine is 100 mg. and for tetracaine, 40 mg.[4] It must be remembered that absorption of these drugs from the mucous membrane is almost as rapid as after intravenous injection. An inflamed mucous membrane as in severe bronchitis or urethritis presents a highly vascular bed and toxic reactions are common due to the sudden high blood levels of local anesthetics reached in such patients.

The observation of these dosages is no guarantee for the absence of reactions to local anesthesia. Inadvertent intravenous injections of these agents or a "low threshold" of the patient's responsiveness cannot be foreseen and it is for this reason that vigilance and preparedness are so important when these drugs are being used.

Summary

Two patients recently seen in our institution had potentially lethal reactions to local anesthetics. Such reactions may occur unexpectedly. Before giving local anesthetics, one must have prepared for the mechanical control of a failing ventilation, for the pharmacologic support of a collapsed cardiovascular system, and for the treatment of convulsions.

References

1. French, J. D.; Livingston, R. B.; Konigsmark, B., and Richland, K. J.: Experimental Observations on the Prevention of Seizures by Intravenous Procaine Injections, J. Neurosurg. 14:43-54 (Jan.) 1957.
2. Moore, D. C., and Bridenbaugh, L. D.: Oxygen: Antidote for Systemic Toxic Reactions from Local Anesthetic Drugs, J. A. M. A. 174:842-847 (Oct. 15) 1960.
3. Moore, Daniel C.: Complications of Regional Anesthesia: Etiology — Signs and Symptoms — Treatment. Springfield, Ill., Charles C. Thomas Company, 1955.
4. Wylie, William Derek, and Churchill-Davidson, H. C.: Practice of Anaesthesia. Chicago, The Year Book Publishers, Inc., 1960.

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Research at University of Florida College of Medicine

Department of Microbiology

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Microbiology has evolved in the past decades from a servant of Medicine discovering and cataloguing etiologic agents of infectious diseases to an independent discipline unraveling fundamental biologic phenomena. This development is illustrated not only by changes of names of the departments representing the discipline, but also by surveying the problems under study, the actual contributions to fundamental knowledge, and by the educational background of the investigators engaged in the field. It is no surprise then, that the composition of the staff in a department of microbiology is varied and the teachers and investigators are recruited from a variety of fields such as chemistry, biophysics, medicine, and biology. Moreover, the research programs in progress range from problems of molecular biology to those in epidemiology and preventive medicine. In the academic setting then, a department of microbiology has a dual role, representing a basic science on one hand and providing service on the other by assisting in the incorporation of new knowledge into the practice of Medicine.

The variety of training found amongst the staff members in the Department of Microbiology at the College of Medicine of the University of Florida is best exemplified by the following. Dr. George W. Hunter III has a background in biology, especially parasitology, and his major experience has been with the Armed Forces during and after World War II in the Philippines, Japan and more recently Latin America. His interests are focused on epidemiology, pathogenesis, diagnosis, and prevention of tropical diseases. On the other hand, Dr. John J. Cebra has training in chemistry, immunochemistry, and biophysics from the University of Pennsylvania, the Rockefeller Institute, and the Weizmann Institute in Israel, respectively. His experimental work deals with structure and function of antibody molecules. Most other members of the Department have training and experience falling in between those mentioned. Similarly, the teaching contributions in the medical and graduate schools are equally varied and represent fundamental and applied microbiology.

In an attempt to review the research programs of the Department of Microbiology in the College of Medicine during the past few years, it seems most logical to begin with the more complex and descriptive approaches and continue with those endeavors attempting to explain biologic phenomena as interactions of molecules or groups of molecules. Only the general essentials of these programs can be discussed and only a few representative publications will be quoted.

Epidemiology of "Swimmer's Itch" and Immunity to Parasitic Infection, Especially Trematodes

(DRS. HUNTER AND CRANDALL)

Dr. G. W. Hunter, III, in association at first with Dr. C. Weinmann and later with Dr. R. B. Crandall, has conducted epidemiologic studies concerned with schistosome dermatitis called "Swimmer's Itch" in man. This disease is caused by the penetration of bird schistosome cercariae into the skin of man. A systematic study and collection of 23,569 fresh water snails from 72 locations in Florida revealed 579 infections with cercariae. None of these cercariae, however, were of the type causing schistosome dermatitis. In addition, an alleged outbreak of "Swimmer's Itch"

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which was reported along the Panama City beaches was investigated. The examination failed to reveal cercariae in the waters of this region. The nature of the lesion appeared to be more characteristic of "Seabather's Eruption" than of "Swimmer's Itch."[1]

The relationship between helminths and their hosts is an extremely complex phenomenon when viewing either the stages of development of the parasite or the sequence of host reactions. Although general experience indicates that some degree of actively acquired immunity becomes manifest during parasitic infections, the efficacy of this immunity is often limited, and the mechanisms involved are difficult to evaluate. Experimental studies concerned with innate and acquired resistance in schistosomiasis are being conducted using a model with the mouse as host and Schistosoma mansoni and Schistosomatium douthitti as parasites. Limited but measurable acquired resistance was induced by an infection with schistosomes, whereby the absolute number of cercariae involved in immunization and the time elapsed between initial exposure and challenge infection determined the extent of resistance induced.[2] Since at least 60 days were necessary for measurable immunity to develop after the first application of cercariae (that is, sufficient time for the parasites to reach maturity), eggs were tested as possible protective antigens. The results indicated that immunization with eggs did not substantially increase resistance with any consistency.[3]

In view of the fact that the infecting cercariae migrate through various tissues and organs during their maturation from the larval to the adult form, it might be expected that innate and acquired resistance could express itself in a variety of mechanisms based on numerous host factors. Thus, various manipulations influencing general reactivity or local reactions, such as infection with unrelated schistosomes, heterologous infection with Ascaris lumbricoides, and treatment with cortisone, increased resistance to challenge infection.[4,5] The mechanisms of increased resistance are essentially unknown and neither serum nor spleen and lymph node cells from immunized animals could be demonstrated to transfer increased resistance to normal animals.

These few selected examples indicate clearly that the elucidation of host resistance in such complex parasitic relationships is difficult. This, in spite of the fact that circulating antibodies are found and that the host acquires immediate and delayed types of hypersensitivity against components of the parasite. It appears that in the highly developed state of parasitic adaptation, the parasite shares certain antigenic components with the host, thus preventing the emergence of an effective immune response. Dr. Crandall's studies on the chemotactic effect of parasitic antigens on host leukocytes are aimed at discerning such antigenic relationships and their importance in native and acquired immunity.

Resistance to Chronic Bacterial Infection and Pathogenic Factors

(Drs. Suter, Shands, Saito and Ramseier)

In view of the chemotherapeutic successes in the treatment of acute infections of man, more interest has been focused on chronic and latent infections and infections caused by usually harmless organisms. An interesting facet of these investigations is that it becomes more and more apparent that nonspecific host responses may be equally or even more essential in resistance to infection than specific responses, such as formation of diphtheria antitoxin or antipneumococcal antibodies. One of the major unsolved questions relating to immunity in chronic infections is the relative importance of cellular and humoral factors. In view of the lack of a decisive involvement of specific antibodies in immunity to tuberculosis, listeriosis, brucellosis and salmonellosis many investigations were focused on the possible changes occurring within phagocytic cells, especially those cells belonging to the reticuloendothelial system (RES). Indeed, RES cells were found to exhibit profound changes during immunization or infection. Some of these changes were observed only qualitatively, but others were also measured quantitatively.

Various alterations can be observed as morphologic changes visible by electron microscopy, increased content of hydrolytic enzymes, ability of the cells to inhibit intracellular multiplication of the parasite, and increased sensitivity of cells to antigens derived from the immunizing organism referred to as cellular hypersensitivity. It is conjectured that responses at the level of the RES cell are essential for development and manifestation of immunity to infection, irrespective of whether it is measured as antibody formation, delayed hypersensitivity, or infection immunity. A summary of these views has been presented in a review.[6] One major weakness of these investigations is frequently the lack of accurate quantitative

measurements for immunity and the inability to relate the state of immunity to the appearance of specific molecular changes as is the case when dealing with circulating antibodies. Future investigations will attempt to find such molecular alterations as an expression of infection immunity. The recent installation of an electron microscope in the Department is helpful in this respect.

Another area of intensive investigation is the mode of action of endotoxins derived from Gram-negative organisms. Endotoxins are complex molecules consisting of protein, lipid, and carbohydrate and exhibit an amazing variety of biologic activities such as pyrogenicity, induction of leukopenia followed by leukocytosis, metabolic alteration, abortion and shock. Our studies are concerned with the mode of action of endotoxins and their possible role in the pathogenesis of infection.[7] Endotoxins have generated great interest because they are formed not only by pathogenic organisms, such as Salmonella and Shigella, but also by usually harmless commensals, for example, Escherichia coli and Proteus. In addition, their complex biologic activity suggests that they provide a nonspecific factor in the pathogenesis of infectious diseases.

Viral Oncolysis and Tumor Immunity

(Dr. Lindenmann)

The fascinating discovery was made by Dr. Lindenmann that a particular inbred strain of white mice was completely refractory to infection with a neurotropic strain of influenza virus. Moreover, this influenza virus would cure these mice of a fatal infection with Ehrlich ascites tumor cells. After recovery, these mice proved to be immune to further infection with the tumor, and the immune state could be transferred to normal mice by means of immune spleen cells or serum. The immune serum contains an antibody which agglutinates tumor cells and therefore is easily detectable.[8,9] These findings open new ways for fruitful investigation concerned with the problem of viral oncolysis and tumor immunity. It has to be kept in mind, however, that one is dealing with a transplantable and not with a spontaneous or induced tumor.

Factors Affecting Viral Replication, Especially Interferon Formation

(Drs. Gifford, Lindenmann, and Sauter)

Recent advances in virology have opened many vistas in regard to the nature of viruses, the existence of infectious nucleic acids and cellular factors related to viral multiplication. The ability to establish cultures of most mammalian tissues and to use these for viral propagation has contributed greatly to the advance in the field. The studies originally undertaken by Dr. Gifford were concerned with the measurement of cellular activity during viral infection, especially of the damage inflicted in the cells. Since the discovery of interferon by Lindenmann and Isaacs, this material has become the focus of interest.

Interferon is a protein produced by cells infected with active or inactivated virus, which is shed into the environment by the cells, and most important, it is capable of preventing viral replication in other cells. The obvious importance of this component for resistance to viral infection or recovery from infection is well recognized. Experimentally it was important to establish at first accurate and sensitive techniques for the qualitative and quantitative determinations of interferon in tissue culture systems.[10,11] Present investigations focus on the conditions which determine production and activity of interferon, such as induction by foreign nucleic acids, the ability of various cell types to respond with interferon production, and finally the mechanism by which interferon interrupts metabolic events of the cell leading to virus formation.[12]

The Structure of γ-Globulin and Activity of Fragments

(Drs. Cebra, Jaquet and Chan)

The most apparent response to antigenic stimulation is the formation of antibodies, the majority of which are found in the γ_2-globulin fraction of plasma and serum. Until recently it has been a mystery as to which part of this protein molecule carries the specific site for its interaction with the antigen. Recent studies by Porter in England demonstrated that the molecule could be split by careful degradation with papain and under reducing conditions into two fragments containing the specific reacting sites and one fragment without such activity. During his stay at the Weizmann Institute in Israel, Dr. Cebra developed a technique which facilitates a comprehensive investigation of the functional capacity of the various fragments derived from γ-globulin in regard to: a) the antibody combining sites; b) the antigenic sites; c) the capacity to set off a series of reactions with proteins of the "complement system;" and d) the ability to "fix" in the skin of certain animals and provoke localized hypersensitivity

reactions.[13,14] The γ_2-globulin molecule is being fragmented in a stepwise fashion using controlled proteolysis by insoluble enzymes as well as being reductively dissociated into its constituent polypeptide chains. Chemical and physicochemical properties of the products are being measured in an attempt to correlate certain structural features of the entire molecule with its aforementioned biologic properties.

Physiologic State of Bacteria in Relation to Biosynthesis of Macromolecules

(Dr. Ecker, formerly in collaboration with Dr. Schaechter)

The fundamental processes by which living cells synthesize the basic cellular constituents leading to growth and function are shared by most, if not all, living organisms. Bacterial systems, because of their homogeneity and ease of manipulation, provide very useful models for the study of these processes.

Recently, interest has focused on the role of ribosomes, intracellular high molecular weight ribonucleoprotein particles, in the over-all process of growth and synthesis. An approach to this problem has been made in studies of the relationship between the rate of synthesis, as determined by nutrient environment, and the cellular content of ribosomes.[15,16] Such studies have been helpful in establishing the function of ribosomes as the primary site of protein synthesis.

Teaching

Teaching represents an activity to which all members of the Department contribute in a concerted fashion. The greatest joint effort is made in the teaching of medical students as part of their second year curriculum. Microbiology is taught as a basic biologic science as well as an applied discipline. Thus, in the first phase emphasis is placed on fundamental life processes as exemplified by microbial physiology and genetics, virology and immunology. The latter is done in close cooperation with the Department of Pathology. In the second phase, emphasis is placed on host response to infection, pathogenesis of infectious diseases, and a discussion of etiologic agents of disease. Continuity is sought in teaching by participation in clinical conferences and rounds during the third and fourth years.

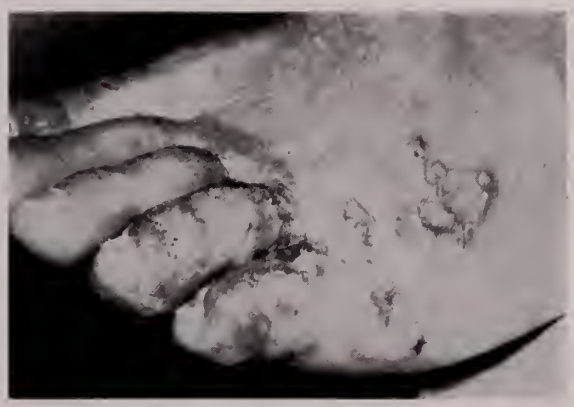
In addition to the medical program, the Department is responsible for a growing program of graduate and postdoctoral teaching. In the former, selected graduate students specialize in microbiology through course work, research, and teaching. In the latter, persons with either a Ph.D. or M.D. degree seek deeper understanding in a specialized area through research. All these teaching programs are highly interwoven and the success of each depends on the quality of the others.

Selected References

1. Hunter, G. W. III; Molloy, J. F., and Ullman, A. F.: More Seabather's Eruption, Am. J. Puh. Health 53:1413-1417 (Sept.) 1963.
2. Hunter, G. W. III; Crandall, R. B.; Zickafoose, D. E., and Purvis, Q. B.: Studies on Schistosomiasis. XVIII. Some Factors Affecting Resistance to Schistosoma Mansoni Infections in Albino Mice, Am. J. Trop. Med. 11:17-24 (Jan.) 1962.
3. Moore, D V; Crandall, R. B., and Hunter, G. W. III: Studies on Schistosomiasis. XX. Further Studies on the Immunogenic Significance of Schistosoma Mansoni Eggs in Albino Mice When Subjected to Homologous Challenge, J. Parasitol. 49:117-120 (Feb.) 1963.
4. Weinmann, C. J., and Hunter, G. W. III: Studies on Schistosomiasis. XIV. Effects of Cortisone Upon the Schistosoma Mansoni Burden in Mice, Expt. Parasitol. 9:239-242 (June) 1960.
5. Hunter, G. W. III; Crandall, R. B., and Arean, V. M.: Attempts to Increase Resistance to Schistosoma Mansoni and Schistosomatium Douthitti Infection in Mice by Heterologous Infections, J. Parasitol. (Part II) 49:55 (Oct.) 1963.
6. Suter, E., and Ramseier, R.: Cellular Reactions to Infection, Advances in Immunology, 4:117-173, 1964.
7. Suter, E.: Hyperreactivity to Endotoxin in Infection, Trans. N. Y. Acad. Sci. 24:281-290, 1962.
8. Lindenmann, J.: Viral Oncolysis With Host Survival, Proc. Soc. Exper. Biol. & Med. 113:85-91 (May) 1963.
9. Lindenmann, J.: Immunity to Transplantable Tumors Following Viral Oncolysis, I. Mechanism of Immunity to Ehrlich Ascites Tumor, J. Immunol. 92:912-919 (June) 1964.
10. Gifford, G. E.; Toy, S. T., and Lindenmann, J.: Studies on Vaccinia Virus Plaque Formation and Its Inhibition by Interferon. II. Dynamics of Plaque Formation by Vaccinia Virus in the Presence of Interferon, Virology 19:294-301 (Mar.) 1963.
11. Lindenmann, J., and Gifford, G. E.: Studies on Vaccinia Virus Plaque Formation and Its Inhibition by Interferon. III. A Simplified Plaque Inhibition Assay of Interferon, Virology 19:302-309 (Mar.) 1963.
12. Gifford, G. E.; Mussett, M. V., and Heller, E.: Comparative Studies on the Production and Assay of Interferon, J. Gen. Microbiol. 134:475-481 (Mar.) 1964.
13. Cebra, J. J.: The Use of Water-Insoluble Papain for Structural Studies of the Products of Antigen-Antibody Interaction, M. D. Anderson Symposium, Conceptual Advances in Immunology and Oncology, New York, Hoeber, Medical Div., 1963, p. 220.
14. Cebra, J. J.: The Effect of Sodium Dodecylsulfate on Intact and Insoluble Papain Hydrolyzed Immune Globulin, J. Immunol. 92:977-990 (June) 1964.
15. Ecker, R E., and Schaechter, M.: Bacterial Growth Under Conditions of Limited Nutrition, Ann. New York Acad. Sc. 102:549-563 (Jan. 21) 1963.
16. Ecker, R. E., and Schaechter, M.: Ribosome Content and the Rate of Growth of Salmonella typhimurium, Biochim. biophys. acta 76:275-279 (Oct.) 1963.

Common Eruptions of the Feet

Fungus infection of the feet is usually caused by ringworm fungi, and less commonly by yeastlike fungi (candida); or it may be simulated by bacterial infection (erythrasma). Clinically there is vesiculation, scaling, and maceration, with a predominant interdigital component. Nail involvement is often associated. Direct microscopic examination of a potassium hydroxide (KOH) preparation is helpful for confirming the diagnosis.



Larva migrans is caused by infestation of the skin with larval forms of cat and dog hookworm (Ancylostoma braziliense). Caused by direct contact with wet contaminated soil, the disease is prevalent during the summer rainy season. Typical are the intensely pruritic papules and tortuous tracks, often complicated by secondary infection and eczematization.

Contact dermatitis of the feet results from sensitization to components of footwear such as plastics (rubber), dyes, tanning agents (chromates) and glues. The eruption is eczematous and conforms to the pattern of the shoes, so that the dorsa of the toes and the dorsa and sides of the feet are primarily affected. Interdigital lesions are either inconspicuous or absent. Patch tests with materials from suspected shoes will help to establish the diagnosis.

Prepared by the Committee on Scientific Projects of the Florida Society of Dermatology

Improvident Information

It is not in agreement with our social makeup to conceal medical truths from the news media of our country. It is only proper that we make public our advances and successes in medicine and surgery. There is little question that the medical profession in the United States is the envy of physicians in every other country in the world. Where once other countries enjoyed this prestige throughout the ages, today the teaching and practice of medicine in America are foremost and respected as such. Because of this factor alone, we as physicians must abstain from releasing improvident or premature information regarding investigative problems. Early successes many times are late failures. What may appear possible in coelenterates, toads and salamanders may be limited in humans. Current reports by some science writers of "new developments" in surgery have appeared in print only hours after the procedures were done. These at times have gained the headlines in the newspaper one day, and the following week the failure is reported in small print somewhere in the middle of the newspaper.

During the past dozen years, about 250 human kidney transplantations have been reported. Of these, the number living over one-half dozen years may be counted on one hand. The recipient patient is already an ill individual, but yet necessitates "conditioning" for homotransplantation. This means immunosuppression by body irradiation, chemicals or organ removal, which may result in an immunologic cripple and possibly death. There also remains the possibility of the transplanted kidney developing a similar disease to that of the organ it replaced. Homografting of organs is yet in the experimental stage and should be treated as such. The press representative must be thoroughly versed by the surgical investigators, and before the article is published, it should be carefully edited by the physicians involved.

Reports of "Miracles With Borrowed Organs" have appeared the last two years in the Wall Street Journal, Life, Saturday Review of Literature, Time and hundreds of lay periodicals and newspapers throughout the world. According to these articles, any organ in the human may be replaced successfully, though in medical circles, this is rather doubtful at the present. Let us, therefore, protect our heritage and regress to the tradition of first reporting our substantiated results in medical journals.

Clifford C. Snyder, M.D.
Coral Gables

Association News

Hiram Phillip Hampton. M.D.
Eighty-Fifth President

At the Ninety-First Annual Meeting of the Florida Medical Association held April 22-25 at the Hotel Americana, Bal Harbour, Dr. Hiram Phillip Hampton was elevated to the presidency of the Association. Representing the third generation of Hamptons to practice medicine in Tampa, he chose to follow in the footsteps of his grandfather, Dr. Hiram J. Hampton, and his father, Dr. Ham Stonewall Hampton. The oldest of four children, Dr. Hampton is engaged in the practice of internal medicine with his brother, Dr. John B. Hampton.

Born in Tampa on Feb. 10, 1913, Dr. Hampton attended local schools. He was awarded a Bachelor of Science degree by Emory University, Atlanta, Ga., in 1934 and in 1937 received the Doctor of Medicine degree from the School of Medicine of that institution. After completing an internship at Cincinnati General Hospital, he served a fellowship residency at Mayo Foundation, Mayo Clinic, Rochester, Minn., from 1938 to 1941.

After receiving a Master of Science degree in medicine at the University of Minnesota, he entered the Army Medical Corps as a first lieutenant, assigned to setting up hospitals in Normandy and Rheims in World War II and was discharged from military duty five years later with the rank of lieutenant colonel. Upon his return from overseas, Dr. Hampton took refresher courses at the University of Michigan and in Chicago before returning to Tampa in 1946 to enter private practice.

In the Florida Medical Association Dr. Hampton was chairman of the Committee on Legislation and Public Policy from 1953 to 1959 and since that time has been chairman of the Council on Legislation and Public Agencies, heading the Committee on National Legislation. A member of the Board of Governors since 1959, he became President-Elect in 1964.

Active also at the national level, he has served the American Medical Association as a member of its Committee on Indigent Care since 1958 and is a member of its Speakers Bureau. In 1964 he became a member of its Legislative Council.

Dr. Hampton has for some years had a prominent part in the development of Health Services for the Indigent. In 1955 he was made chairman of the Committee on Indigent Hospitalization and in 1958 vice chairman of the Citizens Medical Committee on Health by appointment of Governor Collins. Among his many other activities was membership on the Medical Advisory Board of the Sears Roebuck Foundation.

A fellow of the American College of Physicians, Dr. Hampton also holds membership in the American Diabetes Association and the American College of Cardiology.

His social interests include membership in Ye Mystic Krewe of Gasparilla of which he was chosen King in 1948, the Tampa Yacht and Country Club, and the Merrymakers. His fraternity is Alpha Tau Omega and he is a member of St. Andrew's Episcopal Church.

Dr. Hampton and the former Kay Barker, daughter of Judge and Mrs. W. J. Barker, were married in 1949. They have three sons and two daughters.

President's Page

CHARITY

And now abideth faith, hope, charity, these three; but the greatest of these is charity.

Charity has always been an essential part of the practice of medicine. The original meaning of charity is vividly defined in I Corinthians, thirteenth chapter:

Though I speak with the tongues of men and of angels, and have not charity, I am become as sounding brass, or a tinkling cymbal.

And though I have the gift of prophecy, and understand all mysteries, and all knowledge; and though I have all faith, so that I could remove mountains, and have not charity, I am nothing.

And though I bestow all my goods to feed the poor, and though I give my body to be burned, and have not charity, it profiteth me nothing.

Apparently the original meaning of charity is similar to our modern word, empathy. It was synonymous with love. It became more akin to pity. Now it is a tax-deductible monetary gift often made as a conventional civic duty.

In the time of Elizabeth I, local government assumed the obligation to provide for those "who have call on the aid and sympathy of society by reason of age, infirmity or misfortune."

Charitable services by physicians (those rendered without financial compensation) have been a substantial aid to local government and taxpayer in fulfilling their obligation to the infirm who also suffered misfortune. Some consider gratuitous services to those who are wards of the state an obligation of the medical profession. This has led to the involuntary servitude required of young physicians who are interns and residents.

Indeed, through the mediums of gratuitous physicians' services and insufficient payment of hospital costs, state and local government have indirectly imposed an uncharitable 'sickness tax' on those hospital patients paying their own way. Inadequacies in fulfilling state obligation to provide tax-supported health care for those in need have provided the climate where, by act of this Congress, the federal government may assume the obligation to provide personal health services as a right of citizenship to rich and poor alike.

Although we deplore this concentration of government responsibility as unnecessary if the states fulfill their obligations under present law, and we fear the ultimate loss of personal freedom that may result, one benefit may be that the physicians' charity can be merciful and compassionate rather than politically perverted to economic relief for the taxpayer at the expense of the sick.

H. Phillip Hampton

Editorials

Psychiatric Aspects Of Communicating With the Dying

Optimal interpersonality relationships between the physician and patient, especially a fatally ill patient, are rarely capitalized. Chief among the factors making for this unfortunate status is faulty or inadequate communication. The substance of this editorial is derived from many years of practice in the specialty of psychiatry, and a critical review of the literature. Herein, some aspects of the terminal ministration to the patient are focused upon. It is hoped that these comments will bring to full conscious recognition the modifiable factors and their implementation.

The physician may unwittingly harbor guilt feelings stemming from unrecognized or unresolved complexes regarding curing or prolonging life indefinitely. In order to prevent this, he must have adequate knowledge of his own personality structure, and insight as to how he relates himself, with effectiveness, to the patient. He needs to become aware of his own defenses, counterfeelings and countertransference and other factors which might contribute to anxiety, rejection, denial, projections and unresolved fears of death. Negative overidentification with the patient could undermine the doctor's compassionate objectivity, so necessary for patient comfort, peace of mind and body, hope and faith.

Various types of communication, verbal and nonverbal, should be recognized and their utilization furthered through establishing and maintaining optimal rapport with the patient, family, friends and hospital personnel. Communication is effective only when it is effectively transmitted and received. It is a triadic interrelationship involving the physician, the connecting link of symbols with meanings, and the patient.

Aspects of when and how much the physician should tell the patient about a terminal illness vary with the age of the patient, his emotional status, and personality trait ability to face up to reality.

Our wish for the patient is that he have a "normal" and "successful dying," in the sense that all constructive possibilities of treatment are being utilized. This does not necessarily mean "total push" intensive treatment measures just to prolong the process of dying. It is not the doctor's duty to decide how long a patient shall live. The wishes of the patient should also be respected.

Consultation with colleagues and the collaboration of suitable clergy, especially of the patient's choice, should be embraced when indicated. "Life is a fatal disease," but it may also become in its terminal phase, prior to unconsciousness, a triumphant experience.

Frederick L. Patry, M.D.
Bradenton

Reactions to Local Anesthetics

Death from reaction to local anesthetics results from lack of knowledge and lack of equipment. The use of intravenous barbiturates for this accident has been ingrained into our minds so firmly that it becomes a reflex action to reach for a syringe, instead of oxygen. The article on this subject by Dr. Perkins in this issue of The Journal may well be heeded.

The first point is to recognize the reaction as it starts. Drowsiness, slurring speech or a "queer" feeling may be the prodromal signs and symptoms. Irritability, twitching and a fine fibrillary muscle motion may follow. The frightening silent collapse of the respiratory center and the vascular tree is far less dramatic and far more dangerous than the thrashing convulsions which may ensue.

The second point is to develop a pattern of attack. Regardless of the type of reaction, the patient needs artificial respiration as Dr. Perkins

stated. We are so machine-minded that we forget our Scouting first aid. Mouth-to-mouth resuscitation, or mouth-to-nose if the patient is convulsing, is life-saving and eliminates the fumbling for oxygen equipment (if present). Learn this method correctly. It may well be life-saving if equipment is not at hand.

Following the establishment of respiratory motion and an airway, the next step is to restart the arrested heart if this complication is present. A cyanotic heart will not start with closed chest massage. The blood pressure must now be restored with vasopressors. Convulsions can be treated as suggested, but do not rush in. Try oxygen first and use the drugs only if the convulsions are severe enough to interfere with respirations. Keep in mind that the premedicated patient offers a real hazard. The tiny beginning warning signals may be completely suppressed by drugs. Total collapse may be the first and unluckily the last sign that an accident has occurred.

The article is timely and well done. My admiration is with Dr. Perkins who has included two aspirin tablets on the emergency cart for the physician. As a veteran of several such reactions, I suggest four.

John T. Stage, M.D.
Jacksonville

Deaths

Baker, Robert Minor, Sanibel; born in Comorn, Va., July 31, 1893; Medical College of Virginia, Richmond, 1918; interned at St. Luke's Hospital, Jacksonville; served as a first lieutenant in the U.S. Army Medical Corps, 1918-1919; engaged in the general practice of medicine in Jacksonville from 1920 until his retirement in 1959; since that time had resided in Sanibel; held membership in the American Medical Association; was a founder of Jacksonville's Pine Castle School for Retarded Children; died March 14 after a prolonged illness, aged 71.

Enzor, Olin Oliver, Crestview; born in La Pine, Ala., March 2, 1884; Mississippi Medical College, Meridian, 1908; was awarded a degree the following year by the Georgia College of Eclectic Medicine and Surgery, Atlanta; in 1918 was graduated from the Chicago Eye, Ear, Nose and Throat College and later completed a postgraduate surgical course there; engaged in the general practice of medicine and surgery in Florida until 1917; practiced in Newton County, Texas from 1917 to 1925, and returned to Florida in 1925 to practice in Crestview and Okaloosa County until he retired in 1958 because of ill health; in 1926 built Ensor Brothers' Hospital in Crestview, the first hospital in the county, where he was joined in practice by two brothers, Dr. Justus O. Enzor and Dr. Rhett E. Enzor, and a nephew, Dr. Allen A. Enzor; held membership in the American Medical Association; died February 19 of acute coronary occlusion, aged 80.

Johannsen, Marco W., West Palm Beach; born in Hamburg, Germany, Jan. 19, 1909; New York University-Bellevue Hospital Medical School, 1935; served an internship and a residency at Lenox Hill Hospital, New York; practiced internal medicine in New York City from 1938 to 1957 and served as Associate Professor of Clinical Medicine, New York University, Post-Graduate Division from 1953 to 1957; located in West Palm Beach in 1957; was a diplomate of the American Board of Internal Medicine, held membership in the American Medical Association, Association of American Physicians and Surgeons, New York Medical Society, and New York Pathology Society, and was a fellow of the New York Academy of Medicine; died February 22, aged 56.

Lischkoff, Mozart A., Pensacola; born in Pensacola, Jan. 6, 1890; Tulane University School of Medicine, New Orleans, 1910; served an internship at the Eye, Ear, Nose and Throat Hospital in New Orleans the following year and a residency at Algemeines Kraken-Haus, Vienna, in 1911; was a veteran of World War I; practiced his

specialty of ophthalmology and otolaryngology in Pensacola for more than half a century; was three times president of the Escambia County Medical Society; was first vice president of the Florida Medical Association and associate editor of The Journal of the Florida Medical Association in 1928; was a past president of the Florida Society of Ophthalmology and Otolaryngology, the New Orleans Eye, Ear, Nose and Throat Hospital Association, and the Tulane-Florida Medical Alumni Association, and for five years served as secretary of the Gulf Coast Clinical Society; was a prolific writer on medical subjects; also held membership in the American Medical Association, Southern Medical Association and Southeastern Surgical Association, and was a fellow of the American College of Surgeons and the American Otorhinologic Society for Plastic Surgery; died February 20, aged 75.

Post, William Glenn Jr., St. Petersburg; born in Newnan, Ga., April 23, 1897; Jefferson Medical College of Philadelphia, 1921; interned at Philadelphia General Hospital, 1921-1923; came to Florida in 1925 from Macon, Ga., and engaged in the practice of internal medicine in St. Petersburg for 36 years before retiring in 1961 following a heart attack; was a fellow of the American College of Physicians and held membership in the American Medical Association and the Southern Medical Association; died Dec. 30, 1964, apparently from a heart attack, while on a fishing trip to Avon Park, aged 67.

Sackett, Harry Robert, St. Petersburg; born in Springfield, Mass., June 25, 1871; New York Medical College, New York, N. Y., 1893; completed an internship at Metropolitan Hospital, New York, in 1894 and in 1900 engaged in postgraduate work in Berlin, Germany; entered the private practice of general medicine in Holyoke, Mass., in 1894 and since 1920 had practiced in St. Petersburg until he retired in 1956; was president of the Western Massachusetts Medical Society in 1900, the Florida Homeopathic Medical Society in 1936 and Southern Homeopathic Medical Association in 1947; held membership in the American Medical Association, American Institute of Homeopathy and Southern Homeopathic Medical Association; died February 4 of cardiac failure, aged 93.

Sessions, Raymond Rinaldo, Kissimmee; born in Winter Garden, Dec. 24, 1912; Emory University School of Medicine, Atlanta, 1937; interned at Crawford Long Memorial Hospital, Atlanta, and Jersey City Medical Center, Jersey City, N.J.; engaged in the general practice of medicine in Kissimmee from 1939 to 1942 when he entered military service; served with distinction as a flight surgeon in World War II; was discharged with the rank of major in 1946 and resumed his practice in Kissimmee; founded the Kissimmee hospital known as the Medical Center; held membership in the American Medical Association and the Central Florida Obstetric-Gynecology Society; died March 3, aged 52.

Shahan, John, Clearwater; born in Attalla, Ala., April 4, 1890; Tulane University School of Medicine, New Orleans, 1915; veteran of World War I; practiced in Gadsden, Ala., from 1918 to 1934, specializing in radiology; engaged in the practice of his specialty in Clearwater from 1935 to 1951 when illness forced his retirement; moved to Apalachicola in 1958; died of chronic congestive heart failure, February 17, aged 74.

Simpson, Wiley Terrell, Winter Haven; born in Smithville, Ga., July 31, 1896; Tulane University School of Medicine, New Orleans, 1921; interned at Grady Hospital, Atlanta, Ga., and served a residency at Wise Sanitarium, Plains, Ga.; was a veteran of World War I, serving in the Navy Medical Corps; after practicing for brief periods in Plains and in Eufaula, Ala., engaged in the general practice of medicine and surgery for 40 years in Winter Haven; was a past president of the Polk County Medical Association; held membership in the American Medical Association, Southern Medical Association and International College of Surgeons; died January 27, aged 68.

Slaughter, Thomas Kimball Jr., Daytona Beach; born in Summerfield, Aug. 28, 1912; Medical College of South Carolina, Charleston, 1941; interned at the Duval County Hospital, Jacksonville; served residencies at the General Hospital, Greenville, S. C. and McLeod Infirmary, Florence, S. C.; engaged in the general practice of medicine in Madison from 1944 to 1947 and in Daytona Beach from 1947 until he retired in 1958; held membership in the American Medical Association; died February 7, aged 52.

Stander, William Herbert, Miami Beach; born in Warsaw, Poland, in 1892; State Univer-

sity of New York Downstate Medical Center, New York, 1917; retired general practitioner; was a member of the American Medical Association; died January 10, aged 74.

Vincenti, Fred Anthony, Mount Dora; born in Chicigo, Ill., Oct. 26, 1908; Stritch School of Medicine of Loyola University, Chicago, 1933; interned at St. Bernard Hospital, Chicago, and engaged in other postgraduate work at Cook County Postgraduate School of Medicine; practiced general surgery and proctology in Chicago for 19 years before locating in Florida; practiced in Lake County for 14 years, the first three at Howey-in-the-Hills, then became associated with Mount Dora Clinic and later was chief of surgery at Waterman Memorial Hospital in Eustis; held membership in the American Medical Association, Southeastern Surgical Society, American College of Gastroenterology, and American Society of Abdominal Surgeons; was a past president of the Lake County Medical Society; died Oct. 8, 1964, aged 56.

Whitaker, Courtland Daniel, Marianna; born in Harlem, Ga., Dec. 23, 1900; Medical College of Georgia, Augusta, 1927; upon completing an internship at Georgia Baptist Hospital, Atlanta, in 1928, served as resident physician at the Florida State Prison, Raiford, until 1934 when he began 30 years of general practice in Marianna; was a major in the United States Army Reserves; held membership in the American Medical Association, International College of Surgeons, South Eastern Surgical Congress, American Association of Railway Surgeons and Florida Association of Industrial Surgeons; died January 14, of postoperative complications following an operation for an abdominal aortic aneurysm, aged 64.

News

The 453rd Medical Service Flight is being organized as a back-up emergency unit for the hospital group at Cape Kennedy. Physicians through the rank of colonel are needed, also nurses, laboratory technicians and other ancillary personnel. Those interested should contact James B. Hall, Col. MC, 121 South Sinclair Ave., Tavares, or the Medical Service Flight, Patrick Air Force Base, Cape Kennedy.

The regular meeting of the North Florida Pathologists Association is being held Thursday evening, May 20, beginning at 8:00 o'clock at Baptist Memorial Hospital in Jacksonville.

Dr. Emanuel Suter has been appointed Dean of the University of Florida College of Medicine at Gainesville. Dr. Suter has been serving as Acting Dean since November, 1964.

A new publication, "Reviews of Medical Motion Pictures," is available upon request from the Film Library of the American Medical Association, 535 North Dearborn St., Chicago, Ill. 60610. The publication has a short description and a frank, unbiased evaluation of motion pictures available to the medical profession.

Dr. Jacob A. Glassman of Miami Beach addressed the North American Federation of the International College of Surgeons meeting at Las Vegas in late April. Upon invitation, Dr. Glassman discussed new gallstone extractor instruments for the removal of elusive and missed stones in the common duct.

Dr. Frederick L. Patry of Bradenton has been appointed an Ordinary Member, Royal Medico-Psychological Association of Great Britain, a Corresponding Member of the Canadian Psychiatric Association, and a member of the International Association for Child Psychiatry and Allied Professions.

The cardiovascular seminar sponsored by the University of Florida College of Medicine, the University of Miami School of Medicine, the Florida Heart Association, the Central Florida Heart Association and the Northeast Florida Heart Association is being held Thursday and Friday, May 20-21, at the Cherry Plaza Hotel in Orlando. Visiting speakers include Drs. Henry Ellis, Mayo Clinic, Mason Sones, Cleveland Clinic, Bruce Logue, Emory University and William Hollander of Boston University School of Medicine.

The Second Annual Scientific Symposium of the Anclote Manor Foundation was held in Tarpon Springs on March 27. Guest speakers included Dr. Walter E. Barton of Washington, D. C., and Dr. Robert S. Garber of Belle Mead, N.J.

Recommended Dosage of Lomotil Liquid to Control Diarrhea

File: Diarrhea

LOMOTIL®

INITIAL LOMOTIL LIQUID DOSAGE*

Age	
3-6 mo.	½ tsp. t.i.d. (3 mg.)
6-12 mo.	½ tsp. q.i.d. (4 mg.)
1-2 yr.	½ tsp. 5 times daily (5 mg.)
2-5 yr.	1 tsp. t.i.d. (6 mg.)
5-8 yr.	1 tsp. q.i.d. (8 mg.)
8-12 yr.	1 tsp. 5 times daily (10 mg.)
Adult	2 tsp. 5 times daily (20 mg.) (or 2 tablets q.i.d.)

*Based on 4 cc. per average teaspoonful.
Note: After diarrhea is controlled the initial dosage can usually be reduced to meet the requirements of the individual patient.

LOMOTIL® TABLETS/LIQUID

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride ..... 2.5 mg.
(Warning: May be habit forming)
atropine sulfate ..... 0.025 mg.

Precautions
Lomotil is an exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates.

Cautions and Side Effects
Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness and insomnia.
Lomotil is a brand of diphenoxylate hydrochloride with atropine sulfate; the subtherapeutic amount of atropine is added to discourage deliberate overdosage.

SEARLE *Research in the Service of Medicine*

Books Received

Synopsis of Clinical Tropical Medicine. By Oscar Felsenfeld, M.D., M.Sc. Pp. 378. Illustrated. Price $9.85. St. Louis, The C. V. Mosby Company, 1965.

Medical Parasitology. By Edward K. Markell, Ph.D., M.D., and Marietta Voge, M.A., Ph.D. Ed. 2. Pp. 317. Illustrated. Price $8.50. Philadelphia, W. B. Saunders Company, 1965.

Leopold's Principles and Methods of Physical Diagnosis. By Henry U. Hopkins, M.D. Ed. 3. Pp. 503. Illustrated. Price $8.50. Philadelphia, W. B. Saunders Company, 1965.

Fundamentals of Orthopaedics. By John J. Gartland, A.B., M.D. Pp. 338. Illustrated. Price $8.00. Philadelphia, W. B. Saunders Company, 1965.

Physiology of the Eye, Clinical Application. By Francis Heed Adler, M.A., M.D., F.A.C.S. Ed. 4. Pp. 889. Illus. 437. Price $18.75. St. Louis, The C. V. Mosby Company, 1965.

Simple Splinting, The Use of Light Splints and Related Conservative Therapy in Joint Diseases. By Jerome Rotstein, M.D. Pp. 126. Illustrated. Price $6.50. Philadelphia, W. B. Saunders Company, 1965.

Cellular Biology of Myxovirus Infections. Ciba Foundation Symposium. Edited by G.E.W. Wolstenholme, O.B.E., M.A., M.B., F.R.C.P., and Julie Knight, B.A. Pp. 368. Illus. 85. Price $12.00. Boston, Little, Brown and Company, 1965.

Preventive Medicine, Principles of Prevention in the Occurrence and Progression of Disease. Edited by Herman E. Hilleboe, M.D., and Granville W. Larimore, M.D. Ed. 2. Pp. 523. Illustrated. Price $12.00. Philadelphia, W. B. Saunders Company, 1965.

Heart Attack: New Hope, New Knowledge, New Life. By Myron Prinzmetal, M.D., in collaboration with William Winter, Patient, ed. 2. Pp. 232. Illustrated. Price $1.75. (paperback). New York (Simon and Schuster, 1965).

Control of Glycogen Metabolism. Ciba Foundation Symposium. By W. J. Whelan, Ph.D., D.Sc., F.R.I.C., consulting editor, and Margaret P. Cameron, M.A., editor for the Ciba Foundation. Pp. 434. Illustrated. Price $12.50. Boston, Little, Brown and Company, 1964.

Rehabilitation Medicine. A Textbook on Physical Medicine and Rehabilitation. By Howard A. Rusk, M.D., and thirty-six collaborators. Ed. 2. Pp. 668. Illus. 236. Price $15.50. St. Louis, The C. V. Mosby Company, 1964.

(Continued on page 340)

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Patient Care and Special Procedures in X-ray Technology. By Carol Hocking Vennes, R.N., B.S., and John C. Watson, R.T. Ed. 2. Pp. 228. Illustrated. Price $6.25. St. Louis, The C. V. Mosby Company, 1964.

New and Nonofficial Drugs 1964. Council on Drugs of the American Medical Association. Pp. 863. Price $4.75. Philadelphia, J. B. Lippincott Company, 1964.

Activities of Surgical Consultants. Volume II. Surgery in World War II, Medical Department, United States Army. Colonel John Boyd Coates, Jr., MC, USA, Editor in Chief, B. Noland Carter, M.D., Editor for Activities of Surgical Consultants, Elizabeth M. McFetridge, M.A., Associate Editor. Pp. 1062. Illustrated. Price $8.50. Washington, D.C., Office of the Surgeon General, Department of the Army, 1964.

Textbook of Otolaryngology. By David D. DeWeese, M.D., and William H. Saunders, M.D., Ed. 2. Pp. 523, Illus. 405. Price $9.25. St. Louis, The C. V. Mosby Company, 1964.

Fundamentals of Otolaryngology. A Textbook of Ear, Nose and Throat Diseases. By Lawrence R. Boies, M.A., M.D., Jerome A. Hilger, M.D., M.S., and Robert E. Priest, M.D., M.S. Ed. 4. Pp. 553. Illustrated. Price $8.50. Philadelphia, W. B. Saunders Company, 1964.

Communicable and Infectious Diseases. Diagnosis, Prevention, Treatment. By Franklin H. Top, A.B., M.D., M.P.H., F.A.C.P., F.A.A.P., F.A.P.H.A., and Collaborators. Ed. 5. Pp. 902. Illus. 148. Price $21.00. St. Louis, The C. V. Mosby Company, 1964.

The Specialties in General Practice. Edited by Russell L. Cecil, M.D., and Howard F. Conn, M.D. Ed. 3. Pp. 676. Illustrated. Price $17.50. Philadelphia, W. B. Saunders Company, 1964.

Physical Examination of the Surgical Patient. By J. Englebert Dunphy, M.D., F.A.C.S., and Thomas W. Botsford, M.D., F.A.C.S. Ed. 3. Pp. 396. Illustrated. Price $8.50. Philadelphia, W. B. Saunders Company, 1964.

Christopher's Textbook of Surgery. Edited by Loyal Davis, M.D. Ed. 8. Pp. 1,481. Illus. 1,341 on 744 figs. Price $18.50. Philadelphia, W. B. Saunders Company, 1964.

The Liver and Portal Hypertension. By Charles G. Child, 3rd, M.D. Volume I in the Series Major Problems in Clinical Surgery, J. Englebert Dunphy, M.D., Consulting Editor. Pp. 231. Illustrated, Price $8.50. Philadelphia, W. B. Saunders Company, 1964.

Atlas of General Surgery. By Joseph R. Wilder, M.D., F.A.C.S. Ed. 2. Pp. 325. Illustrated. Price $23.50. St. Louis, The C. V. Mosby Company, 1964.

Business Management of a Medical Practice. By Bernard D. Hirsh, LL.B. Pp. 190. Price $7.75. St. Louis, The C. V. Mosby Company, 1964.

X-ray Technology. By Charles A. Jacobi, B.Sc., R.T. (A.R.R.T.), and Don Q. Paris, R.T. (A.R.R.T.). Ed. 3. Pp. 452. Illus. 306. Price $11.50. St. Louis, The C. V. Mosby Company, 1964.

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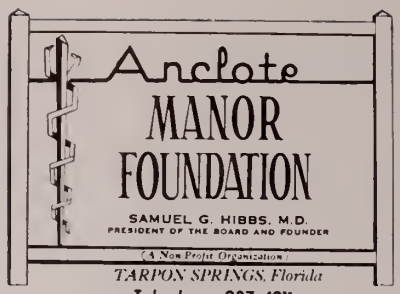
1. Beaser, S. B.: J.A.M.A. 187:887, 1964. 2. Marble, A.: Appl. Therap. 5:614, 1963. 3. Moss, J. M. et al.: Med. Times 92:645, 1964. 4. Linder, M. et al.: New York St. J. Med. 62:337, 1962.



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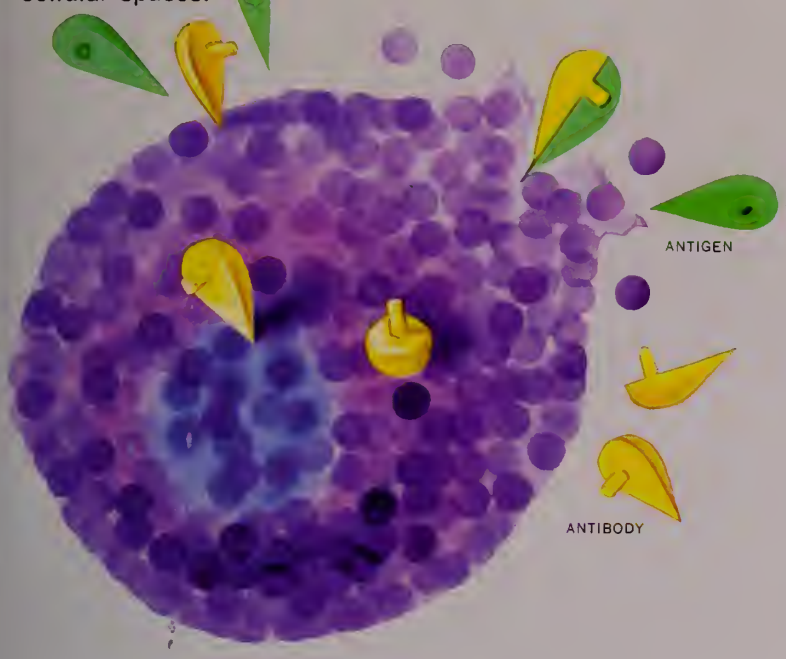

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REFERENCES: 1. Soto-Hall, R.: Med. Sci. *14*:23, 1963. 2. McCarrol, H.R.: Paper read at the Annual Meeting of the American Medical Association, Atlantic City, June 16-20, 1963. See Medical News: J.A.M.A. *185*:39 (July 13), 1963. 3. Gordon, E.J.: Med. World News *5*:54, 1964. 4. Cozen, L.: GP *26*:82, 1962. 5. Larson, C.B.: Postgrad. Med. *26*:142, 1959. 6. Forsyth, H.F.: J.A.M.A. *167*:163, 1958. 7. Weiss, M., and Weiss, S.: J. Amer. Osteopath. Ass. *62*:142, 1962. 8. Rowe, M.L.: J. Occup. Med. *2*:219, 1960.

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*Swartz, C., et al.: Circulation 28:1042, 1963.

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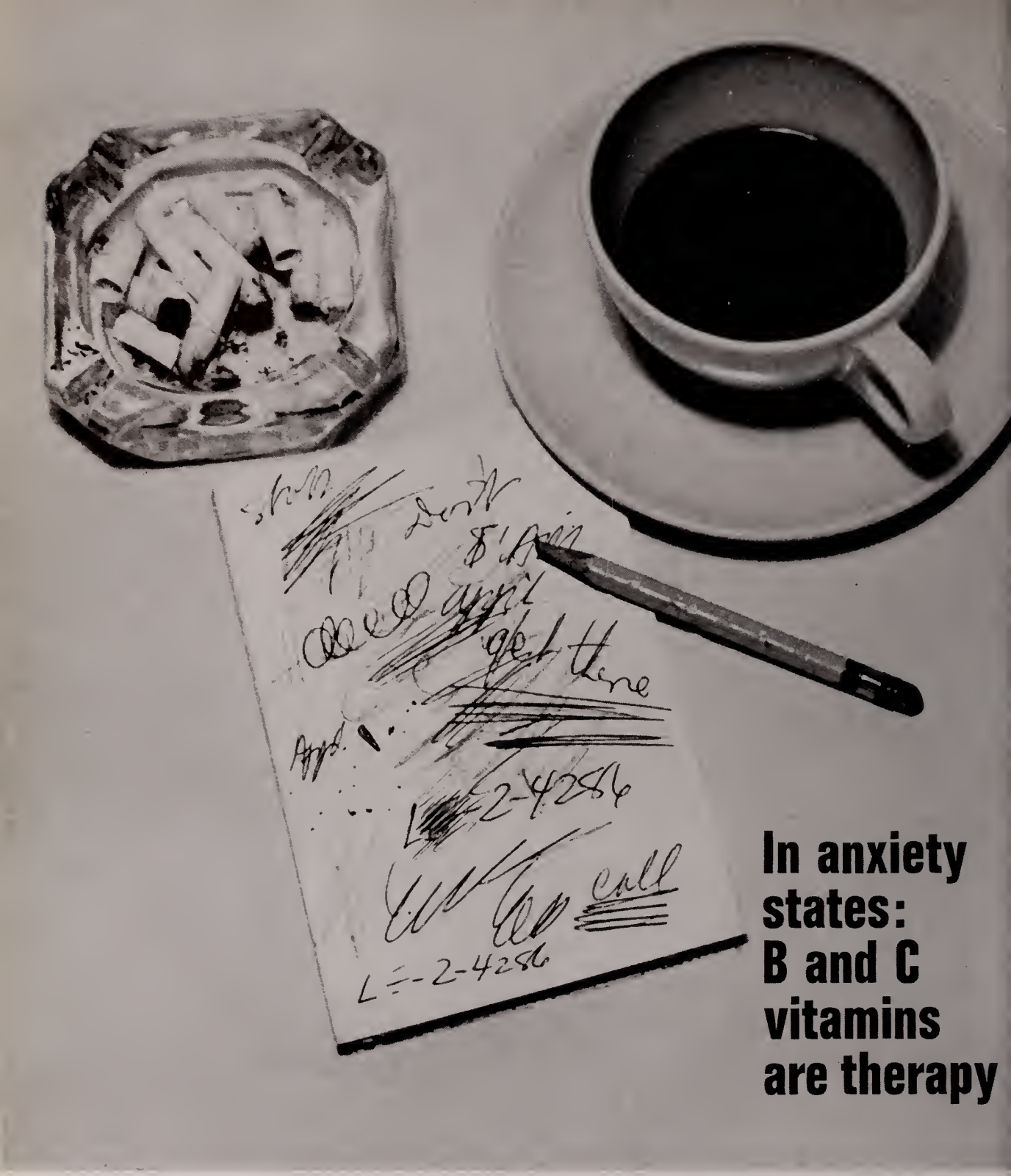

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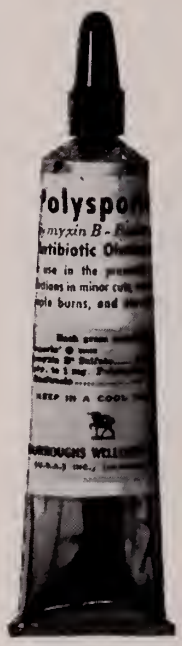

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*Chupkovich, V.; Finnerty, F. A., Jr., and Kakaviatos, N.: The value of chlorthalidone plus reserpine in moderately severe and severe hypertension: A two year study. Presented at the 7th Inter-American Congress of Cardiology, Montreal, June 14–19, 1964.

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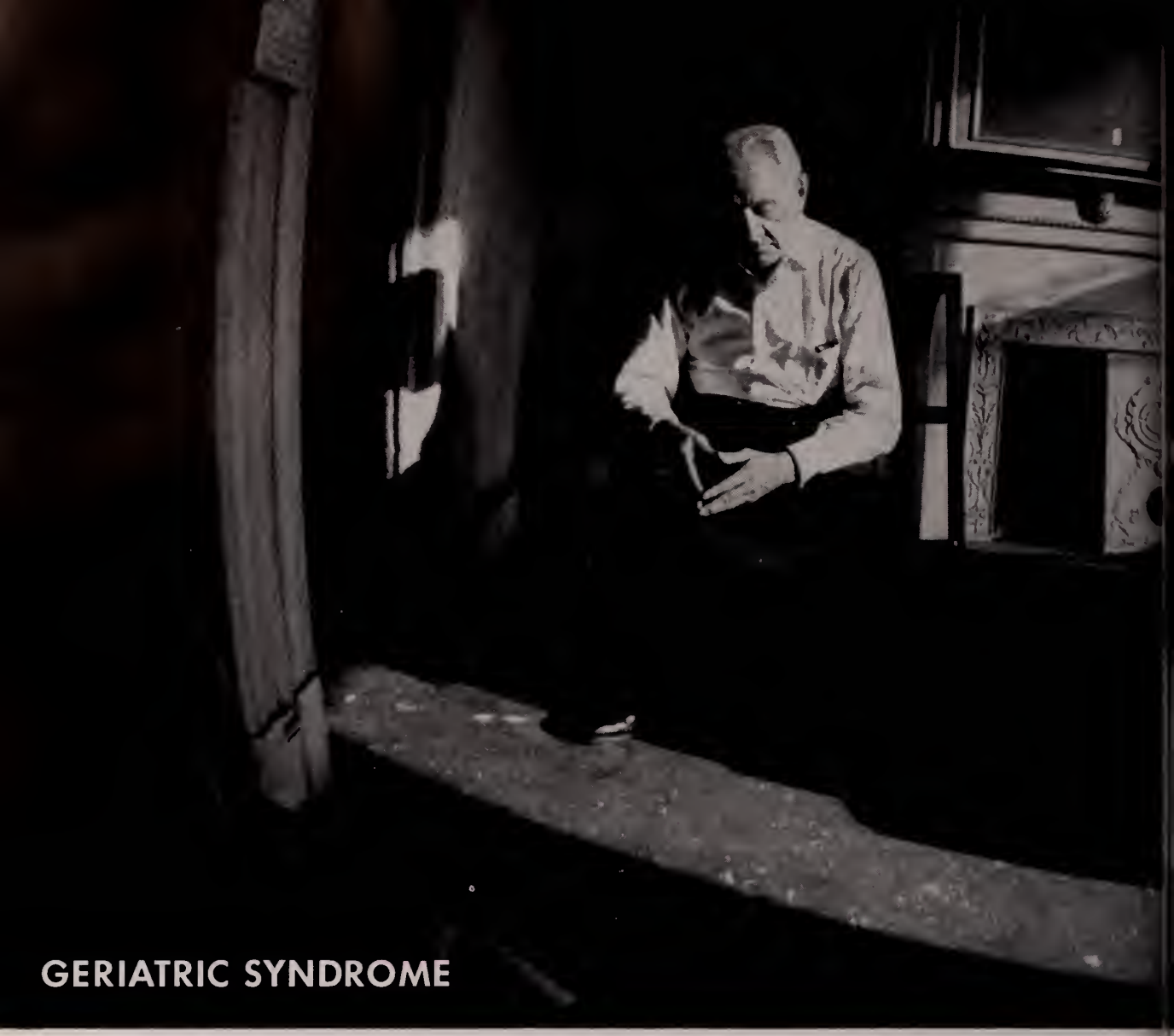

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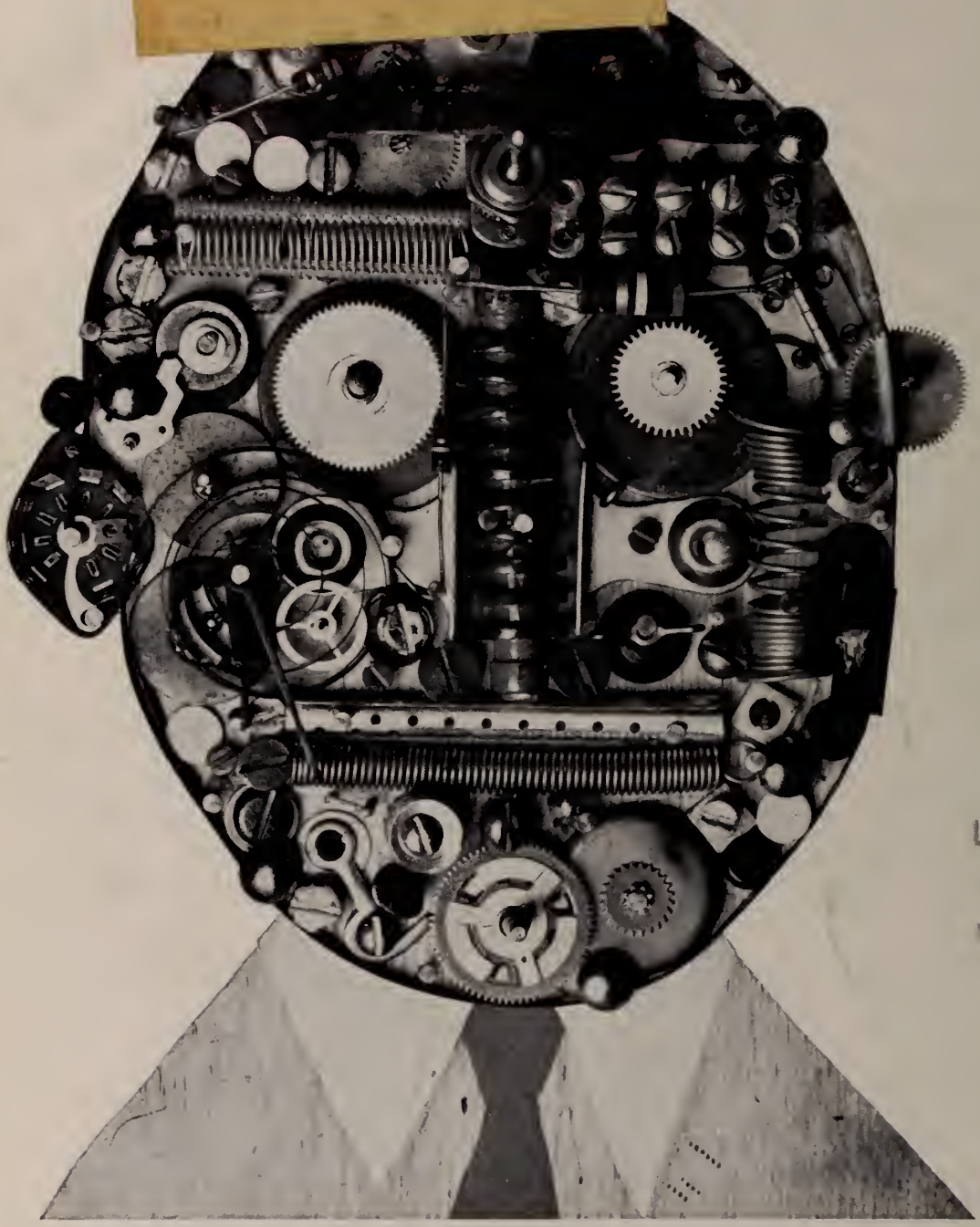

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(1) Frykman, H.M.: Minn. Med., Vol. 38, Jan. 1955. (2) Poth, E.J.: The J.A.M.A., Vol. 163, No. 15, April 13, 1957. (3) McGivney, J.: Texas State Jour. of Med., Vol. 51, No. 1, Jan. 1955. (4) Stern, F. H.: Jour. of The Amer. Ger. Soc., Vol. 11, No. 3, Mar. 1963. (5) Weekes, D. J.: N.Y. State Jour. of Med., Vol. 58, No. 16, Aug. 1958. (6) Abbott, P.L.: Jour. of Oral Surg., Anes. & Hosp. Dental Serv., Vol. 19, July 1961. (7) Weekes, D. J.: E.E.N.T. Digest, Vol. 25, No. 12, Dec. 1963.

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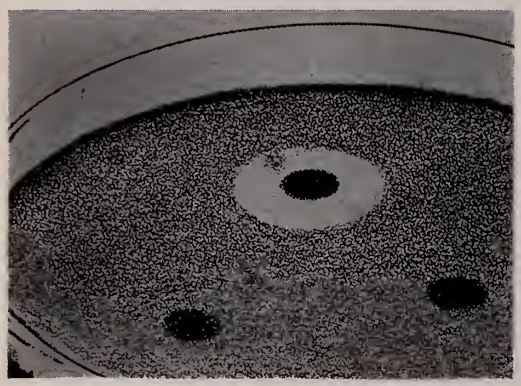

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References: (1) Carroll, G.: Urologists' Letter Club, June 1, 1964. (2) McDonald, D. F., and Short, H. B.: Address to the Fourth Interscience Conference on Antimicrobial Agents and Chemotherapy, New York, Oct. 26-28, 1964.

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Volume 52, Number 6, June 1965

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*Chupkovich, V.; Finnerty, F. A., Jr., and Kakaviatos, N.: The value of chlorthalidon reserpine in moderately severe and severe tension: A two year study. Presented at th Inter-American Congress of Cardiology, M June 14–19, 1964.

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References: 1. Editorial. Brit. M. J. *ii*:223 (July 22) 1961. 2. Rolinson, G. N., and Stevens, S.: Brit. M. J. *ii*:191 (July 22) 1961. 3. Stewart, G. T., *et al.*: Brit. M. J. *ii*:200 (July 22) 1961. 4. Brown, D. M., and Acred, P.: Brit. M. J. *ii*:197 (July 22) 1961. 5. Batchelor, F. R., *et al.*: Nature *183*:257, 1959. 6. Knudsen, E. T., *et al.*: Brit. M. J. *ii*:198 (July 22) 1961. 7. Doyle, F. P., *et al.*: Nature *191*:1091 (Sept. 9) 1961. 8. Acred, P., *et al.*: Brit. J. Pharmacol. *18*:356, 1962. 9. Harrison, P. M., and Stewart, G. T.: Brit. J. Pharmacol. *17*:420, 1961. 10. Editorial. Lancet *ii*:723 (Oct. 5) 1963.

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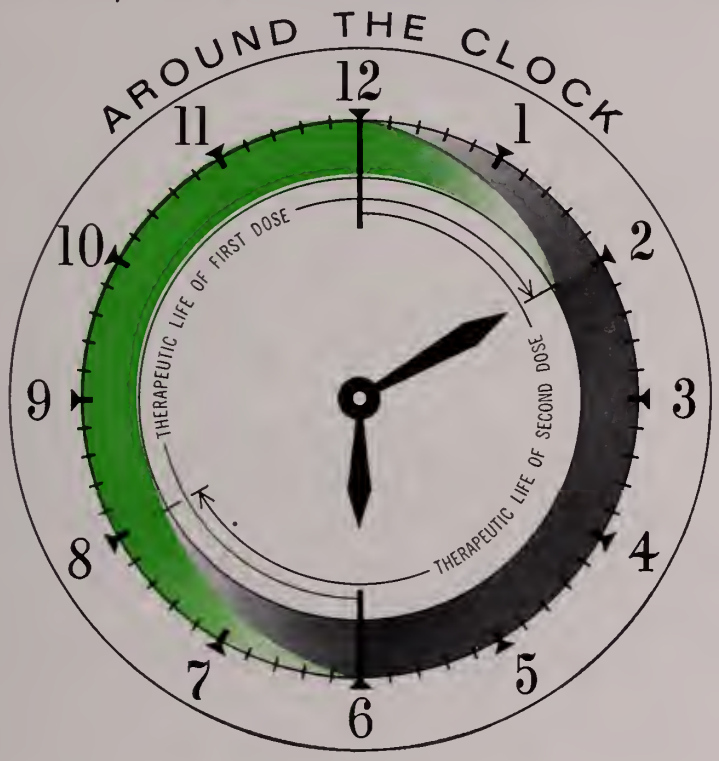

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Dosage: For infants and young children, 15 mg to 25 mg per pound of body weight per day in four to six divided doses. For larger children, the adult dosage scale of 1 to 2 grams per day.

Contraindication: Pediamycin is contraindicated for patients with known sensitivity to erythromycin.

Precautions: Side effects are relatively rare. Should a patient show signs of hypersensitivity, appropriate countermeasures (e.g., administration of epinephrine, steroids, etc.) should be employed and the drug withdrawn.

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*Done, A. K., in Drugs of Choice 1964-1965, Modell, W., ed., St. Louis, The C. V. Mosby Co., 1964, p. 66.

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by increased appetite, gain in weight
an improved sense of well-being.

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out dosage increases; indeed, ini-
osage is often reduced for mainte-
e purposes.

ylate or steroid therapy can usually
minished or, in some instances,
nated.

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as rheumatoid arthritis but the skin
ns are usually not affected either fa-
bly or adversely by treatment.

Precautions
Before prescribing, the physician should obtain a complete history and perform a complete physical and laboratory examination, including a blood count.

The patient should be kept under close supervision and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools.

If coumarin-type anticoagulants are given simultaneously, the physician should watch for excessive increase in prothrombin time.

Side effects
The most common side effects are nausea, edema and drug rash. Infrequently, agranulocytosis, generalized allergic reaction, stomatitis, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug.

Contraindications
These include: edema, hypertension, or danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when other potent chemotherapeutic agents are given concurrently because of the increased possibility of toxic reactions; when the patient cannot be seen regularly; when the patient is senile.

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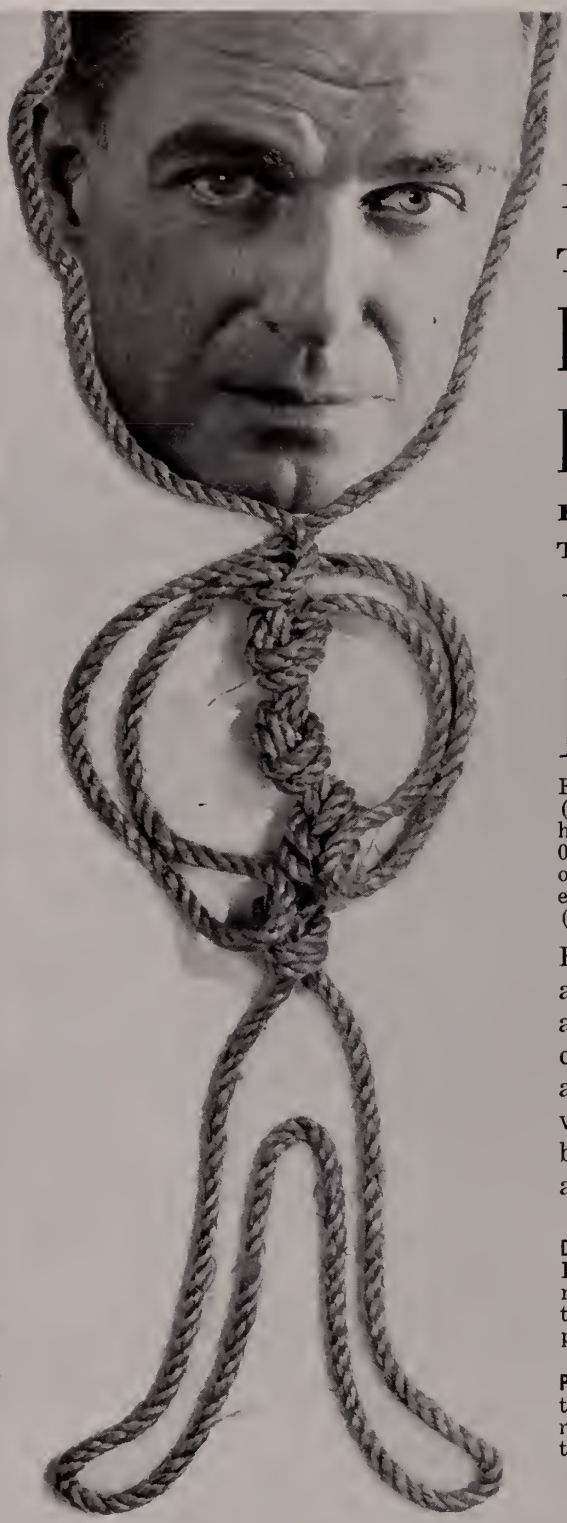

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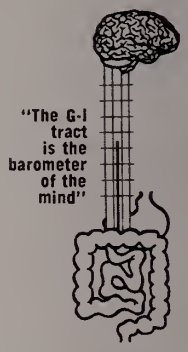

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The JOURNAL
of the Florida Medical Association

Proceedings
Ninety-First Annual Meeting

Florida Medical Association, Inc.
Bal Harbour, Miami Beach, Florida, April 22-25, 1965

General Session

The General Session of the Ninety-First Annual Meeting of the Florida Medical Association was called to order at 11:00 a.m., Friday, April 23, 1965, in the Grand Ballroom of the Americana Hotel, Miami Beach, by President Samuel M. Day.

Dr. Day stated that this general session was devoted to the President's Guest Speaker and welcomed the members of the Association, and guests.

Dr. Day: "Yesterday I talked to you about the fabulous events of an early time. Today, I present to you a fabulous physician of our time, Dr. George T. Pack, of New York City.

"He is a very modest man. We wrote for his curriculum vitae and received two lines. We wrote again and got two more lines; so we telegraphed that we needed a little more than that and received eight pages—not from him but from his secretary. It lists the lectureships he has held, the honorary degrees which have been bestowed upon him, and to give you some idea of the versatility of the man, he was an instructor in Pharmacology and Toxicology at Yale, Professor of Pathology and Associate Dean at the University of Alabama, and Professor of Surgery at New York Medical College and Cornell. He made many friends in the South while he was at the University of Alabama.

"To show you the type man he is, our former President, Dr. William C. Roberts, told me that when he went to Alabama for the two year school and was accepted at Tennessee, he found that somehow he had not taken obstetrics, which was required for entrance at Tennessee. Dr. Pack spent six weeks of his time teaching him obstetrics so he could enter the school of his choice.

Dr. George T. Pack of New York City, guest of Dr. Samuel M. Day, delivers his address on "Cancer Therapy: A Perspective and Prospective View."

"His excellence is known to you and his contributions to medicine. Because of his contributions, the Board of Governors has voted to confer upon Dr. Pack the second Honorary Membership that has been given by the Florida Medical Association. He has also received an Honorary Membership from the Alaska State Medical Association.

"The Florida Medical Association wishes to confer this Honorary Membership: 'This is to certify that George T. Pack, M.D. has been bestowed Honorary Membership in the Florida Medical Association for rendering distinguished service to the medical profession, and contributions to the advancement of the aims and objectives of this Association.' "

Dr. Pack then gave his address on "Cancer Therapy: A Perspective and Prospective View."

First House of Delegates

The House of Delegates of the Florida Medical Association convened at 9:30 a.m. on Thursday, April 22, 1965 in the Grand Ballroom of the Americana Hotel, Miami Beach, Florida, with Dr. Franklin J. Evans, Speaker of the House, presiding.

As a member of the Dade County Medical Association, Dr. Evans welcomed the delegates and wished them a pleasant stay in Miami Beach.

The invocation was pronounced by Dr. Curtis D. Benton Jr., Chairman of the Committee on Religion.

The Speaker announced the membership of the Credentials Committee: Louis C. Murray, M.D., Chairman, Fairfax E. Montague, M.D., Ralph Herz, M.D., and Walter W. Sackett Jr., M.D.

The Chairman of the Credentials Committee announced a quorum of 180 delegates registered out of a possible 253, and moved that they be seated.

Motion was seconded and carried.

Delegates

ALACHUA—John W. Andrews, J. Maxey Dell Jr., Taylor H. Kirby Jr., James M. McClamroch, Walter E. Murphree.

BAY—John L. Fishel, Dixon R. McCloy.

BREVARD—Jack T. Bechtel, Theodore J. Kaminski, Lee Rogers Jr., Ben C. Storey, Joseph C. Von Thron.

BROWARD—Curtis D. Benton Jr., Miles J. Bielek, Russell B. Carson, Gordon B. Carver, Leonard A. Erdman, Frederick W. Fisher, Walter J. Glenn Jr., David J. Lehman Jr., John H. Mickley, Robert H. Pfeifer, Daniel C. Smith, W. Dotson Wells, Scottie J. Wilson — *(Absent — Anthony C. Galluccio, Robert U. Moersch).*

CHARLOTTE—*(Absent—Carl N. Reilly).*

CLAY—William A. Mulford.

COLLIER—William J. Bailey.

COLUMBIA—Frank A. Adel.

DADE—James L. Anderson, William G. Aten Jr., Jerome Benson, Richard C. Clay, Jack Q. Cleveland, Vincent P. Corso, Richard C. Dever, Robert F. Dickey, Richard M. Fleming, M. Eugene Flipse, Marshall F. Hall, Paul S. Jarrett, Banning G. Lary, John B. Liebler, Leon H. Mims Jr., Elwin G. Neal, Edwin P. Preston, James C. Pringle Jr., George W. Robertson III, Walter W. Sackett Jr., William A. Shaver, Clifford C. Snyder, William M. Straight, Charles F. Tate Jr., Arthur W. Wood Jr., Scheffel H. Wright, Nelson Zivitz—*(Absent—Julius Alexander, Edward R. Annis, Morris M. Blau, Rufus K. Broadaway, O. Whitmore Burtner, Francis N. Cooke, Edward W. Cullipher, DeWitt C. Daughtry, Victor D. Dembrow, Maurice M. Greenfield, Morton M. Halpern, Caroline B. Hunter, Thomas W. Hutson Jr., David Kirsh, Alfred G. Levin, Donald F. Marion, Samuel W. Page Jr., Raymond E. Parks, Harold Rand, Edward W. St. Mary, Harold C. Spear, Chauncey M. Stone Jr., Paul N. Unger, Joseph J. Zavertnik).*

DESOTO-HARDEE-GLADES—Gordon H. McSwain.

DUVAL—Hugh A. Carithers, William P. Clarke, Ensor R. Dunsford Jr., John J. Fisher, Lawrence E. Geeslin, Karl B. Hanson, Gordon H. Ira Sr., Thad Moseley, Wade S. Rizk, Lauren M. Sompayrac, G. Dekle Taylor, John H. Terry, William A. Van Nortwick, Jonathan H. Wood—*(Absent—Thomas S. Edwards, Wilbur C. Sumner).*

ESCAMBIA—A. T. Kennedy, George W. Morse, Julian O. Olsen Jr., John M. Packard, Joseph Q. Perry, William M. C. Wilhoit.

FRANKLIN-GULF—Joseph P. Hendrix.

GADSDEN-LIBERTY—James W. Sapp.

HIGHLANDS—Donald C. Hartwell.

HILLSBOROUGH—Ralph C. Aye, Frank C. Coleman, Richard G. Connar, John C. Fletcher, Linus W. Hewit, Richard S. Hodes, Victor H. Knight Jr., Eugene B. Maxwell, W. Mahon Myers, James N. Patterson, Madison R. Pope, William W. Trice Jr., James A. Winslow Jr.

INDIAN RIVER—Charles C. Flood.

JACKSON-CALHOUN—Grayson C. Snyder.

LAKE—Frederick C. Andrews, J. Basil Hall.

LEE-HENDRY—James L. Bradley, H. Quillian Jones Sr., Edward W. Salko.

LEON-WAKULLA-JEFFERSON—Fred A. Butler, James K. Conn, Nelson H. Kraeft, George S. Palmer.

MADISON—*(Absent—Julian M. DuRant).*

MANATEE—Warren G. Darty, Irving E. Hall Jr., Millard P. Quillian.

MARION—West Bitzer, Henry L. Harrell.

MONROE—Ralph Herz.

NASSAU—Daniel M. Jacobs Jr.

OKALOOSA—William W. Thompson.

ORANGE—Courtlandt D. Berry, Louis P. Brady, Robert W. Curry, William R. Daniel, Truett H. Frazier, Harold W. Johnston, Louis C. Murray, W. Dean Steward, Charles R. Sias, Edward W. Stoner, Miles W. Thomley—*(Absent—J. Cornall Howarth).*

PALM BEACH—James F. Cooney, Joseph C. Doane, Hugh Dortch Jr., Russell D. D. Hoover, V. Marklin Johnson, Arthur P. Kaupe, Richard F. Kidder, David W. Martin, William H. Proctor, Myrl Spivey.

PASCO-HERNANDO-CITRUS—William H. Hubbard.

PINELLAS—Clyde O. Anderson, Earl R. Fox, Francis C. Hoare, C. Gibson Hooten, Charles A. Johnson Jr., William H. Keeler III, Charles H. Lasley, James K. McCorkle, Jack A. MaCris, William G. Mason, Carl M. Voyles Jr., Walter H. Winchester, Rowland E. Wood—*(Absent—Charles K. Donegan).*

POLK—Clarence L. Anderson, Paul E. Coury, Gordon R. Heath, Albert G. King Jr., Charles Larsen Jr., Willard E. Manry Jr., Arthur J. Moseley Jr.

PUTNAM—Fairfax E. Montague.

ST. JOHNS—Reddin Britt.

ST. LUCIE-OKEECHOBEE-MARTIN—John M. Gunsolus, Howard C. McDermid.

SANTA ROSA—R. Don Bryan.

SARASOTA—John M. Butcher, Samuel E. Kaplan, Karl R. Rolls, Millard B. White, Robert E. Windom.

SEMINOLE—John T. Johnson.

SUWANNEE-HAMILTON - LAFAYETTE — *(Absent—Frederick T. Mickler Jr.)*

TAYLOR—John H. Parker Jr.

VOLUSIA—William H. Eyster Jr., William H. Harrison Jr., Richard C. Hartsfield—*(Absent—James J. Cunningham, C. Robert DeArmas).*

WALTON—McKinley Cheshire Jr.

WASHINGTON-HOLMES—Walter H. Shehee.

COUNCIL ON SPECIALTY MEDICINE — James D. Beeson, Jack H. Bowen, Andre S. Capi, Edward W. Cullipher, Charles K. Donegan, Emmet F. Ferguson Jr., David W. Goddard, A. Mackenzie Manson, Sanford A. Mullen, Arthur J. Wallace—*(Absent—J. Alfred Bowers, Marlin C. Moore, Bernard L. N. Morgan, Thomas E. Scott Jr., John H. Webb Jr.).*

DELEGATES TO AMA—Jere W. Annis, Reuben B. Chrisman Jr., Burns A. Dobbins Jr., Francis T. Holland, Meredith Mallory.

Dr. Samuel M. Day of Jacksonville, President, presents the Community Service Award of the A. H. Robins Co. to Dr. Clyde O. Anderson of St. Petersburg.

OFFICERS—James T. Cook, Samuel M. Day, Franklin J. Evans, H. Phillip Hampton, Floyd K. Hurt, Eugene G. Peek Jr., Warren W. Qullian.

PAST PRESIDENTS—Ralph W. Jack, Edward Jelks, Walter C. Jones, Francis H. Langley, John D. Milton, Eugene G. Peek Sr., William C. Roberts, William C. Thomas Sr., Leo M. Wachtel, Robert E. Zellner.

Motion was carried to approve the minutes of the called meeting of the House of Delegates held in Jacksonville on February 21, 1965, as published in the April 1965 issue of The Journal.

The Speaker introduced the officers of the Association: Samuel M. Day, M.D., President; H. Phillip Hampton, M.D., President-Elect; Eugene G. Peek Jr., M.D., Vice-President; James T. Cook, M.D., Vice Speaker of the House; Floyd K. Hurt, M.D., Secretary-Treasurer, and Mr. W. Harold Parham, Executive Director.

The Speaker then instructed the House:

Remarks of the Speaker

FRANKLIN J. EVANS

A number of years ago the Florida Medical Association Charter and By-Laws were revised to streamline the proceedings of the annual meeting and at that time the office of Speaker of the House was created. The purpose of the Speaker is to guide the proceedings before this House. It is the intent of both the Speaker and the Vice Speaker to permit each delegate to have an opportunity to voice his views upon the matters which come before the House, but in order to maintain a smooth-running assembly, it is requested that remarks be addressed to the Chair, after being recognized.

The delegates know that the major portion of the work of the House is done by Reference Committees and the Speaker urges you to attend these Reference Committee meetings, which will be announced, to voice your views and express your opinions with regard to matters which come before each committee. This will greatly expedite the work of the House of Delegates at its next meeting.

This House has been fortunate in its past Speakers and I hope that I can duplicate the efficiency of my predecessors.

Two distinguished guests were introduced: Mrs. Willard L. Fitzgerald, President, Woman's Auxiliary to the Florida Medical Association; Mrs. H. Quillian Jones, President-Elect of the Woman's Auxiliary.

The Honorable Robert M. Ervin, President-Elect of The Florida Bar, was introduced.

Mr. Ervin brought greetings from the 8,300 members of The Florida Bar, expressed his appreciation for being invited, and stated his purpose in being present was to seek greater understanding between the two professions.

The Speaker introduced Harry T. Gray, Esq., legal counsel for the Florida Medical Association.

Several members were cited for distinguished accomplishments outside the field of Medicine: Louis C. Murray, M.D., who was appointed by Governor Burns to the Board of Regents; Walter E. Murphree, M.D., who was elected to the City Commission of the City of Gainesville, and Edward L. Cole Jr., M.D., who was elected to the St. Petersburg City Council.

Dr. Day presented the A. H. Robins Company "Annual Award for Outstanding Community Service by a Physician" to Clyde O. Anderson, M.D., of St. Petersburg.

Dr. Clyde O. Anderson of St. Petersburg is the recipient of the 1965 Community Service Award of the A. H. Robins Company. Annually this signal honor is accorded a member of the Florida Medical Association who has rendered distinguished service in civic and community activities. The Association's Board of Governors makes

the choice from candidates who are nominated by the component county medical societies.

Dr. Anderson, the son of a physician, was born in Wilkinsburg, Penn., on June 10, 1909. He first came to Florida in 1914, returning each year during the winter months with his family until 1925 when they became permanent residents in Sebring. Dr. Anderson was graduated from Sebring High School where he was valedictorian of his class and earned letters in four sports.

After attending the University of Florida and receiving his medical degree from Emory University School of Medicine, he did postgraduate work at the University of Michigan. He is a member of Theta Chi social fraternity and Alpha Kappa Kappa medical fraternity. Dr. Anderson interned at Tampa Municipal Hospital, then returned to St. Petersburg to become associated with his father in the practice of medicine. In 1942 he entered the United States Army Medical Corps and was discharged in 1945 as a major. He then resumed his medical practice in St. Petersburg.

During his 31 years of practice, Dr. Anderson has served the community actively both in a professional and a civic capacity. A member of the Pinellas County Medical Society, he served as president in 1955, was on the board of directors for four years and has been chairman of many important committees. Also active in the Association, he served as vice president in 1960 and was a member of the Board of Governors for five years. He was one of three members on the committee for setting up the Association's Medical Foundation and he served as secretary and treasurer for three years. He was Councilor of District Five from 1953 to 1955 and on the Key Physician Committee the same years. He served as co-chairman of the Association's convention in St. Petersburg in 1955, and was a member of a Reference Committee in 1962.

Dr. Anderson is an active staff member of St. Anthony's Hospital, was chief of staff in 1959 and has been a member of the executive committee a number of years. He is also an active staff member at Mound Park Hospital and has been chairman of numerous committees. He is a member of the American Medical Association, the Southern Medical Association, the United States Committee, Inc., of the World Medical Association, the Society of Tropical Medicine, and the Florida Diabetic Association, serving as chairman in 1961.

Always interested in the welfare of the state, Dr. Anderson was a member of the Pinellas County executive committee for Senator George Smathers, Senator Spessard Holland and Governor Dan McCarty. He was also a member of the state executive committee for Senator Holland. He served as state chairman of the Florida Medical Committee for Better Government and as a member of the Medical Advisory Committee of the Florida State Welfare Board.

During the years Dr. Anderson's activities in the community have been impressive. He has served on the Urban Renewal Committee as vice chairman, as a director of the United Fund, and director of Goodwill Industries of which he was president in 1959. He was chairman of the rehabilitation committee of Goodwill and medical director from 1955 to the present. He was a member of the board of governors of the Junior Chamber of Commerce for six years and the board of directors of the St. Petersburg Quarterback Club for six years, having been a member for 16 years. He is a member of the Christ Methodist Church and has served on the board of stewards for many years.

Dr. Anderson has remained a loyal alumnus of the University of Florida throughout the years. In 1957 he received the Significant Alumni Award from the University for outstanding service to the profession, community, state and University, the first such award ever given. He has served the University Alumni Club and Gator Boosters in every known capacity. As president of the University of Florida Alumni Association in 1950, he was a member of the committee selecting the University Flag, the Loyalty Fund Committee and Alumni Century Tower Committee. Dr. Anderson has been chairman of the University Alumni Medical School Advisory Committee and vice chairman of the State Medical Advisory Committee for the J. Hillis Miller Medical Center since 1953. He has been a member of the University of Florida Endowment Corporation Board of Trustees since 1950 and served as its president and chairman of the executive committee for 10 years. His name appears on a bronze plaque as a member of the Medical Advisory Committee of Florida Physicians for the J. Hillis Miller Medical Center of which he has been vice president since 1952.

Dr. Anderson has an untiring interest in youth. He was chief physician for the St. Petersburg Little League from 1947 to 1954, and in charge of physical examinations for the athletic department of St. Petersburg High School for 20 years. He was a member of the University of Florida Faculty Committee of Athletics and on the consulting staff of the Katherine Payne Rehabilitation Center.

Interested in local welfare, Dr. Anderson was a representative of the Pinellas County Medical Society for the Red Cross and Community Chest. He is a member of the St. Petersburg and Florida State Chamber of Commerce and the St. Petersburg Inter-Civic Council. A member of numerous committees of the Committee of 100 in St. Petersburg, Dr. Anderson was on the fund-raising executive committee for the Florida Presbyterian College and received a Charter Alumnus Award from the College. He serves as vice president for the City of St. Petersburg Trust Foundation and is vice chairman of the St. Petersburg Golf Patrons Committee. Dr. Anderson is a member of the St. Petersburg Rotary Club, serving as president in 1961. He is at present chairman of the committee for the Rotary World Youth Assembly to be held in 1966.

The recipient of many certificates of appreciation and citations, Dr. Anderson received a St. Petersburg Silver Citizens Nomination Award in 1958. He was presented the Centennial Award from the University of Florida and was made an honorary member of the Florida Blue Key. He received an honorary "F" Club Award in 1959, one of four ever presented. He has been given a Certificate of Appreciation from the Florida Alumni Association, a bronze plaque from the Pinellas County Medical Society for service and a 25 year Certificate of Service from St. Anthony's Hospital. He received a Certificate of Appreciation from Goodwill Industries and the Good-Willy Award in 1959. The St. Petersburg Rotary Club has presented him with a Certificate of Merit Award and a plaque for services rendered. He is an honorary Kentucky Colonel and an Admiral in the Nebraska Navy.

Dr. Anderson is a past president of Lakewood Country Club, the Squires Club, and the Emmett Kelly Tent of the Circus Saints and Sinners, of which he has been a trustee for five years. Also, he served as chairman for the Fall Guy Show in 1962 and 1963. He is a member of the St. Petersburg Yacht Club, all Masonic bodies, including the Egypt Temple Shrine, the International Shrine Club and the Newcomen Society.

Dr. and Mrs. Anderson have two children, a daughter and a married son. He also has three lively granddaughters. He has a vital interest in all sports and plays golf for relaxation. This active physician is known throughout the community and state for his ability and energy. He is recognized as the right man if there is a big or difficult job to be done.

Dr. Anderson: "It was really a shock this morning when I received my delegates' packet and saw my name listed for this award. It is a great satisfaction, because it means recognition by my own people."

Dr. Day presented a Certificate of Honorary Membership to Dr. Dan C. Ogle, formerly Surgeon General of the Air Force, and now Executive Director of the Pinellas County Medical Society.

Dr. Robert B. McIver of Jacksonville is congratulated by Dr. Samuel M. Day of Jacksonville, following presentation of the Certificate of Merit, the Association's highest honor, to Dr. McIver.

Dr. Ogle expressed his appreciation, stated that he had many friends among the members of the Florida Medical Association, and that this honorary membership was one of the finest honors he had ever received.

The Speaker then introduced Dr. Samuel M. Day, President.

Permission was granted by the House to Dr. Day to take an item out of order on the agenda and present to Dr. Robert B. McIver the Certificate of Merit, the Association's highest honor.

Certificate of Merit

Whereas, Robert Boyd McIver, M.D., of Jacksonville, a life member of the Florida Medical Association, has served the Association, the medical profession and the public with distinction for many years and is worthy of the Association's highest tribute, and

Whereas, This outstanding physician was born in Spartanburg, South Carolina, on April 19, 1892; was graduated from the Boys Preparatory School in Moultrie, Georgia, in 1908; received the Bachelor of Arts degree four years later from Wofford College in his native city; was awarded the degree of Doctor of Medicine in 1916 by the Jefferson Medical College of Philadelphia; and completed a residency at the Pennsylvania Hospital in Philadelphia in 1918; and

Whereas, This distinguished physician entered the Medical Corps of the United States Army in 1918, serving first as ward surgeon at Camp Jackson, South Carolina, then in France as surgeon with a mobile operating team on detached duty from Base Hospital 60 and later as assistant chief of the surgical service at the hospital in Tours before being discharged from military duty in 1919 with the rank of captain; and

Whereas, This able physician entered the private practice of medicine in Jacksonville in 1920, limited his practice to genitourinary and general surgery in 1925 and ten years later to genitourinary surgery only; served as president of the staff and head of the Department of Urology at Duval Medical Center and St. Vincent's Hospital, and established an approved residency in urology in each of these institutions; was for years consultant in urology at the Flagler and East Coast hospitals in St. Augustine and the Veterans Administration Hospital in Lake City; and

Whereas, This eminent physician was president of the Duval County Medical Society in 1932; was elected Secretary-Treasurer of the Florida Medical Association in 1944 and served continuously in that office until he became President-Elect in 1951 and President the following year; and

Whereas, This prominent physician has since 1920 been affiliated with the American Medical Association and the Southern Medical Association, and since 1938 with the American Urological Association; was president of the Southeastern Section of the American Urological Association in 1948; became a diplomate of the American Board of Urology in 1940 and a fellow of the American College of Surgeons in 1924; and has for many years enjoyed a national reputation as a speaker and lecturer; and

Whereas, This versatile physician has rendered exceptional service to his community and state; served for more than a decade as a member of the Florida State Board of Health; in 1941, was head of the medical section of Civil Defense in Duval County when the office of Civilian Defense in Washington, D. C., requested that regional community blood banks be established in the state; pioneered in this undertaking and became the first president of the Jacksonville Blood Bank, serving in that capacity until 1958 when he became chairman of the board, an office he still holds; issued an invitation to all persons interested in blood banking to meet in Jacksonville early in 1947 and under his expert guidance the first state blood bank association in the United States was formed; and rendered invaluable service through the years to the development and progress of blood banking at all levels; therefore be it

RESOLVED, That the Certificate of Merit, the Association's highest honor, be presented to this dedicated physician and outstanding citizen of Florida in recognition of his unselfish service and generous expenditure of time and effort through the years in the interest of the Association, the medical profession and the public.

Florida physicians who have been members of the Association for 37 years or more were honored by the House of Delegates and later gathered for a special meeting where further recognition was accorded to them.

Dr. Day introduced his mother, Mrs. Samuel M. Day Sr. of Alexander City, Alabama; his sister, Miss Carolyn Day; his nurses, Mrs. Gladys Evearitt and Mrs. Gretta Keene, and his wife, and thanked them for their assistance during the past year.

Dr. Day then gave his presidential address.

(The complete text of President Day's address will be published in the July issue of The Journal because of its historical significance.)

Following his address, the House gave Dr. Day a standing ovation.

The Speaker announced the personnel of Reference Committees and times and places of their meeting as follows:

I. HEALTH AND EDUCATION
James L. Anderson, Chairman
Karl B. Hanson
Karl R. Rolls
David W. Martin
Edwin P. Preston

II. PUBLIC POLICY
Madison R. Pope, Chairman
Lawrence E. Geeslin
W. Mahon Myers
Lee Rogers Jr.
Banning G. Lary

III. FINANCE AND ADMINISTRATION
William C. Thomas Sr., Chairman
George W. Morse
Eugene B. Maxwell
David W. Goddard
Richard M. Fleming

IV. LEGISLATION AND MISCELLANEOUS
Charles S. Sias, Chairman
Fred A. Butler
William H. Keeler III
Russell B. Carson
Francis N. Cooke

Meetings: Friday, April 23:

I. 10:30 a.m. Health & Education—Bal Masque Room
II. 10:00 a.m. Public Policy—Bermuda Room
III. 9:30 a.m. Finance & Administration—Barbados Room
IV. 9:00 a.m. Legislation & Miscellaneous—Westward Room

Dr. Evans stated that all reports and resolutions would be found either in the Handbook or in the delegates' packets.

Dr. William M. Straight, Chairman, Committee on Archives, was recognized.

Dr. Straight: "For the next few moments we are to pause to commemorate the lives of our colleagues who have passed on since our last meeting. The names are reported in the Handbook and in the supplemental report. For each of these physicians, 53 in number, a rose has been placed in vases on the podium. The month of May 1964, was indeed a grievous month for our Association. During that month we lost three of our past presidents, David R. Murphey Jr., Shaler Richardson, and Herbert E. White. The death of these men merits our special commendation.

He asked that the House stand for a moment of silent reverence in memory of their deceased colleagues.

Dr. Straight: "I would like to make one more announcement. We are this year honoring the members of our Association who have been members for 37 years or more. Each of them will receive a ribbon on his badge when he registers. Will those in the room please stand to be recognized? We will further recognize these men at a meeting in the Caribbean Room at 1:30 p.m. on Friday. Each and every member of the House

of Delegates is invited to attend and meet these members."

The "32 Plus" members who were present stood and were vigorously applauded by the House.

The Speaker asked for additional reports or resolutions.

Dr. Ralph Herz, of Monroe, presented a resolution as an individual on Medicare, which was assigned No. 65-17 and referred to Reference Committee No. 4.

Dr. James L. Anderson, of Dade, speaking for Dr. William M. Straight, presented a resolution on the AAPS Essay Contest, which was assigned No. 65-18 and referred to Reference Committee No. 3.

Dr. Walter W. Sackett Jr., of Dade, moved that the rules be suspended so that a resolution might be passed at this first House of Delegates.

Motion was seconded and carried unanimously.

Resolution

WHEREAS this body is ever mindful of the many warm associations formed over the years and

WHEREAS, it owes a special debt of gratitude to those who have served it faithfully from the position as a regular member to its highest office, and

WHEREAS, in the higher echelon of its heart this Association holds that one member of such calibre and who has attended this assembly for nearly 40 years, and recently disabled by an occupational disease; then be it

RESOLVED that this body recognize these facts by speeding this message to Joe Stewart, M.D.—Get well, Joe—stat.

The Speaker announced that the Blue Shield Annual Meeting would be held immediately following recess of the House of Delegates' meeting; that the President's Guest Speaker, George T. Pack, M.D., of New York, would speak at the General Session at 11:00 a.m. on Friday, and that the Woman's Auxiliary luncheon would be held on Friday at 12:30 p.m. in the Medallion Room, to which husbands were also invited.

Dr. Peek announced the FLAMPAC Breakfast to be held at 7:30 a.m. on Friday, with the Honorable Syd Herlong, Congressman from District 5 and members of the House Ways and Means Committee, as guest speaker.

The House of Delegates recessed at 10:50 a.m. to reconvene on Sunday, April 25, at 9:30 a.m.

President's Address

The address of the President of the Florida Medical Association, Dr. Samuel M. Day, at the Annual Meeting on April 22, 1965, was of such historical interest that he has graciously consented for it to be published in the July issue of The Journal, which will be devoted to the history of medicine in Florida. The address is a part of the official proceedings of the Annual Meeting.

Second House of Delegates

The House of Delegates reconvened at 9:50 a.m. on Sunday, April 25, 1965, in the Bal Masque Room of the Americana Hotel, Miami Beach, Florida, with Dr. Franklin J. Evans, Speaker of the House, presiding.

Dr. Louis Murray, Chairman of the Credentials Committee, reported 191 delegates registered, constituting a quorum, and moved that they be seated.

Motion was seconded and carried.

Delegates

ALACHUA—John W. Andrews, J. Maxey Dell Jr., Taylor H. Kirby Jr., James M. McClamroch, Walter E. Murphree.
BAY—John L. Fishel, Dixon R. McCloy.
BREVARD—Jack T. Bechtel, Theodore J. Kaminski, Lee Rogers Jr., Ben C. Storey, Joseph C. Von Thron.
BROWARD—Gordon B. Carver, Frederick W. Fisher, Anthony C. Galluccio, Walter P. Glenn Jr., David J. Lehman Jr., John H. Mickley, Robert H. Pfeifer, Daniel C. Smith, W. Dotson Wells, Scottie J. Wilson—*(Absent—Curtis D. Benton Jr., Miles J. Bielek, Russell B. Carson, Leonard A. Erdman, Robert U. Moersch).*
CHARLOTTE—Carl N. Reilly.
CLAY—William A. Mulford.
COLLIER—William J. Bailey.
COLUMBIA—*(Absent—Frank E. Adel).*
DADE—James L. Anderson, Pedro Arroyo Jr., William G. Aten Jr., George S. Baldry, Jerome Benson, Michael Bevilacqua, Edward B. Blum, Richard C. Clay, Jack Q. Cleveland, Francis N. Cooke, Vincent P. Corso, DeWitt C. Daughtry, Richard C. Dever, Robert F. Dickey, L. Washington Dowlen, Richard M. Fleming, M. Eugene Flipse, Kermit H. Gates, Maurice M. Greenfield, Marvin L. Jaffee, Paul S. Jarrett, Albert C. Jaslow, John B. Liebler, Leon H. Mims Jr., Charles A. Monnin Jr., Elwin G. Neal, Samuel W. Page Jr., Edwin P. Preston, James C. Pringle Jr., Guillermo R. Puente-Duany, William E. Riemer, George W. Robertson III, Walter W. Sackett Jr., T. D. Sandberg, Daniel L. Seckinger II, William A. Shaver, Chauncey M. Stone Jr., William M. Straight, Charles F. Tate Jr., Paul N. Unger, Arthur W. Wood Jr., Scheffel H. Wright—*(Absent—Rufus K. Broadaway, Edward W. Cullipher, Marshall F. Hall, Bannnig G. Lary, Harold Rand, Edward W. St. Mary, Clifford C. Snyder, Harold C. Spear, Nelson Zivitz).*
DESOTO-HARDEE-GLADES—Gordon H. McSwain.
DUVAL—Hugh A. Carithers, William P. Clarke, Clyde C. Collins, Ensor R. Dunsford Jr., John J. Fisher, Lawrence E. Geeslin, Karl B. Hanson, Gordon H. Ira Sr., Thad Moseley, Wade S. Rizk, Irvin C. Schneider, Lauren M. Sompayrac, G. Dekle Taylor, John H. Terry, William A. Van Nortwick, Jonathan H. Wood.
ESCAMBIA—A. T. Kennedy, George W. Morse, John M. Packard, Joseph Q. Perry, William M. C. Wilhoit—*(Absent—Julian O. Olsen Jr.).*
FRANKLIN-GULF—Joseph P. Hendrix.
GADSDEN-LIBERTY—James W. Sapp.
HIGHLANDS—Donald C. Hartwell.
HILLSBOROUGH—Ralph C. Aye, Frank C. Coleman, Richard G. Connar, John C. Fletcher, Linus W. Hewitt, Richard S. Hodes, Victor H. Knight Jr., Eugene B. Maxwell, W. Mahon Myers, James N. Patterson, Madison R. Pope, William W. Trice Jr., James A. Winslow Jr.
INDIAN RIVER—Charles C. Flood.
JACKSON-CALHOUN—Grayson C. Synder.
LAKE—Frederick C. Andrews, J. Basil Hall.
LEE-HENDRY—James L. Bradley, H. Quillian Jones Sr., Edward W. Salko.
LEON-WAKULLA-JEFFERSON—Fred A. Butler, James K. Conn, Nelson H. Kraeft, George S. Palmer.
MADISON—*(Absent—Julian M. DuRant).*
MANATEE—Warren G. Darty, Irving E. Hall Jr.—*(Absent—Millard P. Quillian).*
MARION—West Bitzer, Henry L. Harrell.
MONROE—Ralph Herz.
NASSAU—Daniel M. Jacobs Jr.
OKALOOSA—William W. Thompson.
ORANGE—Courtlandt D. Berry, Louis P. Brady, Robert W. Curry, William R. Daniel, Truett H. Frazier, J. Cornall Howarth, Harold W. Johnston, Louis C. Murray, W. Dean Steward, Charles R. Sias, Edward W. Stoner, Miles W. Thomley.
PALM BEACH—James F. Cooney, Joseph C. Doane, Hugh Dortch Jr., Russell D. D. Hoover, V. Marklin Johnson, Arthur P. Kaupe, David W. Martin, William H. Proctor, Myrl Spivey—*(Absent—Richard F. Kidder).*
PASCO-HERNANDO-CITRUS—William H. Hubbard.
PINELLAS—Clyde O. Anderson, Earl R. Fox, Francis C. Hoare, Douglas W. Hood, C. Gibson Hooten, Charles A. Johnson Jr., William H. Keeler III, Charles H. Lasley, James K. McCorkle, Jack A. MaCris, William G. Mason, Carl M. Voyles Jr., Walter H. Winchester, Rowland E. Wood.
POLK—Clarence L. Anderson, Paul E. Coury, Gordon R. Heath, Albert G. King Jr., Charles Larsen Jr., Willard E. Manry Jr., Arthur J. Moseley Jr.
PUTNAM—Fairfax E. Montague.
ST. JOHNS—Reddin Britt.
ST. LUCIE-OKEECHOBEE-MARTIN—John M. Gunsolus, Howard C. McDermid.
SANTA ROSA—*(Absent—R. Don Bryan).*
SARASOTA—John M. Butcher, Samuel E. Kaplan, Karl R. Rolls, Millard B. White, Robert E. Windom.
SEMINOLE—*(Absent—John T. Johnson).*
SUWANNEE-HAMILTON-LAFAYETTE — *(Absent — Frederick T. Mickler Jr.).*
TAYLOR—John H. Parker Jr.
VOLUSIA—William H. Eyster Jr., William H. Harrison Jr., Richard C. Hartsfield—*(Absent—James J. Cunningham, C. Robert DeArmas).*
WALTON—McKinley Cheshire Jr.
WASHINGTON-HOLMES—Walter H. Shehee.
COUNCIL ON SPECIALTY MEDICINE — James D. Beeson, Andre S. Capi, Edward W. Cullipher, Charles K. Donegan, Emmet F. Ferguson Jr., David W. Goddard, A. Mackenzie Manson, Sanford A. Mullen, Arthur J. Wallace—*(Absent—Jack H. Bowen, J. Alfred Bowers, Marlin C. Moore, Bernard L. N. Morgan, Thomas E. Scott Jr., John H. Webb Jr.).*
DELEGATES TO AMA—Jere W. Annis, Reuben B. Chrisman Jr., Burns A. Dobbins Jr., Francis T. Holland.
OFFICERS—James T. Cook, Samuel M. Day, Franklin J. Evans, H. Phillip Hampton, Floyd K. Hurt, Eugene G. Peek Jr., Warren W. Quillian.
PAST PRESIDENTS—Ralph W. Jack, Edward Jelks, Walter C. Jones, Francis H. Langley, John D. Milton, Homer L. Pearson Jr., Eugene G. Peek Sr., William C. Roberts, William C. Thomas Sr., Leo M. Wachtel, Robert E. Zellner.

The Speaker recognized guests from allied professions: Alvin D. Farver, D.D.S., President, Florida State Dental Society; Mrs. Edna Rodak, President, Florida Medical Assistants Association; Wava D. Hartsel, R.N., First Vice President, Florida Nurses Association; Lucille W. Turner, L.P.N., President, Licensed Practical Nurses As-

sociation of Florida; Mr. Millard Berman, Vice President, Florida Chapter, American Physical Therapy Association; Richard Bixler, D.V.M., President-Elect, Florida State Veterinary Medical Association, and Rachel M. Diddell, R.T., Florida Society of Radiologic Technologists.

Dr. Day presented to Dr. Robert L. Williams, of the University of Florida College of Medicine, representing Dean Emanuel Suter, a check in the amount of $4,770.08 from the American Medical Education and Research Foundation, which is a contribution free of all restrictions as to use. Another check, in the amount of $4,657.58 was presented to Dr. Hayden C. Nicholson, Dean of the University of Miami School of Medicine.

Dr. Day announced that there is a bill to be presented to the Legislature, which has been approved by all FMA Committees except the Board of Governors, to increase support to the University of Miami by $1,000 for each medical student. He mentioned this so that the members would support this bill.

Members of Reference Committee No. I included Drs. James L. Anderson, Karl B. Hanson, Karl R. Rolls, David W. Martin and Edwin P. Preston.

REPORT OF REFERENCE COMMITTEE NO. I

Health and Education

Dr. James L. Anderson: "Mr. Speaker, Mr. President and Members of the House of Delegates: Your Reference Committee gave careful consideration to items referred to it and makes the following report:

"The Reference Committee moves the adoption of the Report of the Council on Medical Education and Hospitals with the following changes:

"Paragraph No. 4 is changed to read, 'Working with all interested groups in the area of voluntary health facilities and services planning as recommended by the AMA, is an urgent necessity for Florida physicians.'

"The first recommendation, line 9, is changed to read, '. . . schools and representatives of the Florida Academy of General Practice for methods to implement executions of this resolution.' The last sentence of this recommendation is deleted.

"The second recommendation is amended to read, 'The Council highly recommends the establishment by each county medical society, of a voluntary health facilities and services planning board and that a state committee be formed to act as a consultant to the local planning boards.'

"The Committee on Hospitals recommendation on page 16 is changed to read, 'It is recommended that bed utilization committees of the attending staff be formed in all hospitals.'

"Mr. Speaker, I move the adoption of this portion of the report, as amended."

Motion was seconded.

Dr. David J. Lehman Jr., of Broward: "What is the purpose of the committees mentioned in

your last recommendation? If the purpose of these committees is to screen patients before admission, they should be called screening committees. If it is concerned with bed utilization, laboratory services, drugs, etc., it should be called just a 'utilization committee' not a 'bed utilization committee.' "

Dr. Anderson: "I think it would vary from community to community."

Dr. Lehman: "I would like to amend the motion—that the word 'bed' be stricken."

Amendment was seconded and carried.

The motion as amended was carried.

Council on Medical Education and Hospitals

HUGH A. CARITHERS, *Chairman*

Council:

The Council met once during the Association's administrative year 1964-1965 with members of all committees present. The Council was charged with the following responsibilities by the Board of Governors and spent considerable time working with the following:

Resolution 64-4 "Consent for Autopsies" presented by the Pinellas County Medical Society. The Council felt that, after proper rewording by the Association's legal counsel and the A.M.A., it should be sent to the Florida Association of Undertakers with the hope of gaining their support and cooperation, and that the Council on Legislation and Public Agencies, to which the resolution was referred, be requested to make every effort to obtain sponsorship of the Bill in the legislature.

Resolution 64-18 and 64-7, "Need for Family Physicians" and "General Practice," Marion County Medical Society and Orange County Medical Society, were studied jointly as they are very closely related or actually overlapping. Resolution 64-18 was presented to the A.M.A. House of Delegates in June and was approved. The A.M.A. has appointed an Ad Hoc committee to study the problem in depth.

Working with all interested groups in the area of voluntary health facilities and services planning as recommended by the AMA, is an urgent necessity for Florida physicians.

Recommendations:

The Council agrees with the General Principles stated in Resolution 64-18 "Need for Family Physicians," but very strongly opposes this matter being taken before the State Legislature and recommends that it be left to the Medical Profession and Medical Schools for solution pending findings of the A.M.A. Ad Hoc Committee. It was recommended that the problems outlined in Resolution 64-7 "General Practice," be further studied with close liaison with the two medical schools and representatives of the Florida Academy of General Practice for methods to implement executions of this resolution.

The Council highly recommends the establishment by each county medical medical society, of a voluntary health facilites and services planning board and that a state committee be formed to act as a consultant to the local planning boards.

Committees:

Committee on Hospitals. — Needed legislation in the area of hospitals and nursing homes is dependent upon the size of the community. Consideration should be given to legislative changes which would raise the legal bed capacity of licensed hospitals from the present minimum of 10 beds to a minimum of 25 beds. The Committee feels that 10 bed hospitals are not able to have the equipment and facilities necessary for adequate hospital care in today's urbanly oriented society.

Physicians should recognize their responsibility for making and invoking rigid rules concerning unnecessary hospital admissions. Overutilization of hospital beds is a major concern of this Committee.

Recommendation:

It is recommended that utilization committees of the attending staff be formed in all hospitals.

Committee on Internships and Residencies. — For the second time within recent years, a brochure on internships and residencies was mailed out to the senior medical students in the United States. This brochure pointed out the advantages of "Florida's Medical Climate" and it is believed the publicity given will reap unmeasurable rewards in better house staffs for Florida hospitals. Enough brochures were printed to mail to next year's senior class. Most of the hospitals with internship and residency programs contributed to the financing of this project.

Recommendation:

It is again recommended that the Board of Governors sponsor the creation of a joint committee composed of representatives of the Florida Medical Association, Florida Academy of General Practice, and the two medical schools in an effort to formulate ways of interesting young physicians in general practice. (This is the recommended solution to residency.)

Committee on Medical Schools. — Five members of the Association representing the Committee on Medical Schools, met with the Dean of the University of Florida College of Medicine and members of his staff on February 27, 1965. The participants were: Matthew E. Morrow Jr., M.D., J. Maxey Dell Jr., M.D., Emanuel Suter, M.D. Samuel P. Martin, M.D., and Hayden C. Nicholson, M.D.

It is evident that a need exists for closer cooperation and interchange of information between the medical schools and organized medicine.

Committee on Physician Placement. — During the 1964-65 Association year, the Committee carried out its two basic responsibilities of (1) establishing policy for and supervising operation of the physician placement service, which is administered by the Executive Office, and (2) serving, along with faculty representatives of the state's two medical schools, as advisory committee to the State Medical Student Scholarship Program, which is administered by the State Board of Health. During the year, one formal meeting was held, on May 6, 1964. The remainder of the Committee's business was transacted by correspondence and telephone.

With respect to the state scholarship program, it should be noted that Resolution 64-19 ("Proposal for a New Approach to Florida's Medical Scholarship Program") was approved in principle by the House of Delegates in May 1964, and referred to the Board of Governors for further study. This resolution had been introduced as an individual by the immediate past chairman of the Committee. In September 1964, the Board voted that the subject of the resolution not be implemented by taxes on physicians, and requested the Committee on Physician Placement to review the state scholarship program and make recommendations for its abolition or improvement. It also asked the Committee to explore the entire area of medical scholarships and loans and make appropriate recommendations. These far-reaching matters are being taken under study by the Committee and a report will be forthcoming at the earliest practicable time.

The physician placement service has had another active year. During calendar 1964, 601 opportunities were listed with the service, while some 544 physicians were assisted in finding practice locations in Florida. These figures reflect only those individuals who actually registered for and were provided help; a large amount of information was received from and transmitted to a much greater number of persons for which detailed records were not kept. It is difficult to determine how many of these physicians actually have located in the state, and especially to what extent each was assisted by the placement service.

In keeping with the recommendation approved by the House of Delegates in 1964, increased information and publicity concerning the placement service were sought and made available to the public and the profession, particularly through the "Briefs" newsletter and newspaper articles. During the 1964 American Medical Association Clinical Convention in Miami Beach, the service co-sponsored with the AMA Physicians Placement Service, and assisted in staffing an exhibit which attracted favorable attention from physicians from throughout the nation and the public press.

A brief summary follows of opportunities and physicians by specialty which were listed with the placement service during 1964.

Field of Medicine	Opportunities	Physicians
General Practice	220	109
Internal Medicine	94	108
Pediatrics	48	17
Otolaryngology	42	12
Industrial Medicine	29	6
Ophthalmology	24	28
Obstetrics and Gynecology	22	58
Psychiatry	21	13
General Surgery	19	90
Dermatology-Allergy	18	14
Orthopedic Surgery	16	16
Urology	14	15
Administrative Medicine	14	2
Radiology	12	34
Anesthesiology	6	11
Neurosurgery	1	3
Pathology	1	2
Plastic Surgery	0	3
Pediatric Surgery	0	2
Colon and Rectal Surgery	0	1
TOTALS	601	544

It may be readily observed that in Florida in 1964 the greatest medical opportunities apparently were in the fields of general practice, pediatrics, otolaryngology and industrial medicine. Fewest opportunities, therefore possibly indicating adequately met needs or, in some cases, oversupply, were in the specialties of general surgery, obstetrics and gynecology, and radiology.

Recommendation:

That efforts be continued to provide increased information to the profession and the public concerning the existence and activities of the Association's physician placement service.

Dr. Anderson: "The Reference Committee moves the adoption of the Report of the Scientific Council with the addition of another recommendation: '4. It is further recommended that the Committee on Postgraduate Education become more active in working with medical schools toward the establishment of a better program of continuing education for the practicing physicians of Florida.'

"Mr. Speaker, I move the adoption of this portion of the report, as amended."

Seconded and carried.

Scientific Council

RICHARD C. DEVER, *Chairman*

Council:

The Scientific Council has continued its work with the wholehearted cooperation of its constituent committees during the past year.

Committees:

The Journal and Other Publications. — A total of 65,630 copies of The Journal of the Florida Medical Association containing 832 pages has been printed within the past year. The number of pages of advertisements in each issue remains about the same as in 1963-1964. The number of pages of scientific material has been increased over the past year. Despite this increase in editorial material, a backlog of excellent scientific information remains, and with this in mind the Editorial Board continues a selective scrutiny of all submitted material.

The specialty groups, the county medical societies and their individual members have continued their interest. This cooperation has made the Editor's task a stimulating and satisfying one for 1964-1965.

Committee on Postgraduate Education. — A total of 33 postgraduate courses have been approved for the 1964-1965 year. These covered a wide range of subjects and were sponsored by a number of organizations. Sponsors included the two medical schools, county medical societies, hospitals, voluntary health agencies, and special interest organizations.

Research. — A total of four new applications were considered and approved. In addition, a continuation of a previously awarded grant was approved. The Committee has considered the matters of suitable marking of research equipment and disposition of it at the termination of research projects. As well, it considered the desirability of reporting results of research back to the Committee. In addition, there has been a joint meeting with the Public Health Committee to explore means of developing interest in and facilitating clinical research by practitioners throughout the state of Florida.

Scientific Work. — The Committee met in May and September of 1964 to plan the 1965 Scientific Sessions and accepted the offer made by Smith, Kline and French of their color television unit for use in the program. The Committee has enjoyed excellent relations with the special interest groups whose meetings are held in conjunction with the Florida Medical Association and appreciates their cooperation in furthering its endeavors to provide a stimulating and informative scientific program.

Recommendations:

1. The Committee on Postgraduate Education suggests that psychiatry and therapeutics have not been as well represented in postgraduate seminars as have other aspects of medical practice. In addition, the geographical distribution of programs has not been ideal, particularly from the standpoint of the counties in the western part of the state. It is hoped that these inequities will be considered in future programs.

2. The Committee on Research recommends that an effort be made to publicize the availability of research funds to practitioners throughout the state and to solicit requests for funds to carry out clinical research by practitioners not necessarily associated with large medical centers.

3. The Committee on Scientific Work recommends the continuation of the present format of the Scientific Sessions of the annual meeting and further recommends the continuation of efforts to integrate the planning of the program with the special interest groups within the Association.

4. It is further recommended that the Committee on Postgraduate Education become more active in working with medical schools toward the establishment of a better program of continuing education for the practicing physicians of Florida.

Dr. Anderson: "The Reference Committee moves adoption of the Report of the Council on Specialty Medicine with the addition at the end of Recommendation No. 1 of the following words, 'with the exception of Blue Shield service contracts.'

"Mr. Speaker, I move the adoption of this portion of the report, as amended."

Dr. James D. Beeson, Council on Specialty Medicine: "It is the feeling of a number of us that when an organization such as Vocational Rehabilitation seeks to underwrite an individual who may have a Blue Shield service contract, a new set of rules applies. I do not see why this should be exempted when we have a large organization underwriting all other aspects of the patient's care at full dollar value.

"I move to strike the addition or amendment to Dr. Ferguson's report."

Motion was seconded.

Dr. W. Dean Steward, of Orange: "I am sure this was brought out at the Reference Committee meeting. Blue Shield and Blue Cross contracts carry a provision that anyone who receives payment of his hospital bill or medical or surgical care under any government agency, whether it be VA, VR, Medical Assistance, or any other program, the contract is void for that hospitalization. Therefore, if you strike out this recommendation of the Committee, you will have the patient being stuck with a bill he cannot afford to pay."

Dr. Karl Hanson, of Duval: "It was our feeling that we are committed to accept the fee regardless, as long as the individual requesting it has a "J" contract of Blue Shield. Vocational Rehabilitation, for one, uses the money which is available through insurance up to the point that they can pay, and in the case of Blue Shield, physicians have contracted to take care of these people, and we felt we should not go back on our contract."

Dr. Robert E. Zellner, of Orange: "This is not germaine at all. It doesn't make any difference whether you pass this amendment or don't pass it. If a man comes under Vocational Rehabilitation—it is very simple, Blue Shield won't pay. It seems to me that you just muddy the water and make someone think he might get paid if you do adopt the Reference Committee recommendations because it suggests that Blue Shield might pay."

Dr. Wm. E. Riemer, of Dade: "I would like to ask the chairman of the committee who drew up this report to clarify for the House how this wording and exempting Blue Shield service contracts would affect us in the future since there is a move on in some states to take over the Blue Cross-Blue Shield service contracts by state insurance commissioners to be operated by state government agencies."

Dr. Emmet F. Ferguson Jr., Council on Specialty Medicine: "I think Dr. Zellner has already answered that."

Dr. Beeson: "One last thing. Perhaps this has changed the last few months, but this came to a head because Vocational Rehabilitation in a number of instances in our county hid behind the existence of a Blue Shield low-option contract and refused to underwrite the ordinary fee for the physicians involved in the cases."

Dr. Ferguson: "It is no longer applicable."

Motion to strike the amendment was carried.

Motion to approve the Report of the Council on Specialty Medicine as printed in the Handbook was carried.

Council on Specialty Medicine

EMMET F. FERGUSON JR., *Chairman*

Council:

The Council on Specialty Medicine held two meetings during the Association's administrative year, 1964-1965. Since the Council serves in a liaison capacity with the various specialty groups; it is requested that even greater effort be made to bring the problems of the specialty group before the Council for discussion and mediation rather than take individual action.

Many problems have been presented to the Council for consideration.

Recommendations:

After thorough investigation and discussion, the following action was taken:

1. That the Florida Medical Association request the Medical Advisory Committee to the State Vocational Rehabilitation Service to pay the treating physician an amount equal to the difference between any token insurance policy the patient may have and the prevailing vocational rehabilitation fee schedule, in the event the insurance is less than that of the fee schedule.

2. That physical therapists not practicing under the supervision of a physician licensed to practice medicine in the state of Florida be called to the attention of the Board of Governors with the suggestion that the State Board of Medical Examiners be asked for enforcement of the provisions of the Medical Practice Act.

3. That all items pertaining to physical medicine or physical therapy be critically reviewed by the Medical Advisory Committee to the Commission and all those that fall within the realm of the practice of medicine be eliminated from the physical therapists' schedule.

4. That the Council recommend that the Workmen's Compensation Division make provision for verification of referring physician on all claims by physical therapists.

5. That the Council on Specialty Medicine support the Fee Schedule Committee in the action regarding the Veterans Administration Fee Schedule:

"Motion carried unanimously that Dr. Campbell be advised that the Committee is pleased that the Veterans Administration has considered accepting the Relative Value Studies and if they wish to accept the entire Relative Value Studies as it is with a conversion factor of 5.0, this would be acceptable: However, the interim proposal is contrary to the principle of relative values and FMA policy as established by the House of Delegates, and therefore it cannot be approved."

6. That all Vocational Rehabilitation Service fees be based on the Florida Medical Association 1962 Relative Value Studies with a conversion factor of 5.0 (this is to include Social Security Disability Determination Evaluations). This is in agreement with the Board of Governors' action of September 24, 1964.

7. That it is realized that the Vocational Rehabilitation Service uses as its qualification, board certified or qualified physicians. It is recommended that any physician who feels he is qualified and wishes to do work for Vocational Rehabilitation Service may be given the opportunity to present his credentials and may be used by the panel regardless of location or certification if his credentials are satisfactory to the Medical Advisory Board of Vocational Rehabilitation Service.

Dr. Anderson: "The Reference Committee considered Resolution No. 65-3, Establishing Committees on Tobacco, and Resolution No. 65-16, Smoking and Health, together as one resolution and recommends approval of this resolution as No. 65-3. The Reference Committee further feels that to teach the danger of tobacco use on the one hand and to accept tobacco ads in The Journal and rent space at the Convention to promote tobacco use on the other hand, is patently inconsistent. Therefore, the Committee strongly recommends that tobacco ads not be acceptable and convention space not be made available to tobacco companies.

"Mr. Speaker, I move the adoption of this portion of the report."

Dr. Eugene G. Peek Jr., Vice President: "I would like to have a little discussion on this inasmuch as both of these resolutions refer to children. Not too many of our children read our medical journals, nor are they buying ads in our Journal which we need very badly. They also help put on our annual meeting, and I think we are adult enough to know whether we want to smoke or not.

"I move that the last portion of this report be stricken."

Motion was seconded.

Dr. DeWitt C. Daughtry, of Dade: "I think this is being totally inconsistent. I do not think we can compromise principle at all—we are either against it or we are for it, and if we are against it, we must be against it all the way. I don't think there is any question about it."

Dr. Ralph Herz, of Monroe: "I have been very active in teaching high school students not to smoke, but I don't think this should apply to our organization. I think if men want to they are going to smoke, and I don't think you should try to deprive them of the pleasure of smoking."

Dr. Day: "I would like to explain that this matter was considered by the Board of Governors. They felt this advertising was made to a mature audience, even though we have gone on record as opposing smoking. Physicians are not unanimous in their stand and for that reason they did not feel that they should toss the cigarette people out."

Dr. Irving E. Hall Jr., of Manatee: "We have tried to teach children not to smoke, but most of them start smoking because they see adults doing it. I took my ten year old son into the exhibit hall and he commented that there was a movie about cancer caused by smoking and right across the aisle they were giving away cigarettes."

Dr. Steward: "I agree with what Dr. Hall has said. We are not only compromising our principles, but we are setting a price on our virtue. If we continue to accept this advertising, we might as well send a delegation to Congress to oppose the labeling of cigarettes as dangerous."

Dr. Charles F. Tate Jr., of Dade: "As an individual, I have probably talked to more children about this problem than anyone in this room. I am scheduled next week to speak to 2,000 about this very same thing. Invariably at the end of these sessions, I am asked this question, 'What are the doctors doing about this?' I don't think we can compromise our principles. There have been adequate studies done here in Florida to show there is a four time increase in smokers where there are adult smokers in the family. We must act and talk to the public in a way that is consistent. These kids are much more sophisticated than we give them credit for. If they know that we are double talking here, we are not going to get an effective program going."

Dr. Nelson Kraeft, of Leon: "Mr. Speaker, I would like to ask for some information from our Journal Editor. What is this great amount of money that we need to subsist on to help with our meetings and publish our Journal?"

Dr. Thad Moseley, Editor of The Journal: "Gentlemen, this problem has been presented to us through the past five years. I would strongly recommend that this body settle the question, one way or the other, and I would vote for the amendment at this time—and not put the onus on the Editor of The Journal and your Executive Committee. I move we ask for the question on the amendment and then I would like to appear before you again.

"In answer to Dr. Kraeft's question, a page of advertising in The Journal is $100 per month. The income for your Journal last year was roughly this $100 x 12."

Motion for the question was seconded.

Dr. Zellner rose to a point of order and asked if this motion limited debate or cut off debate.

The Speaker replied that it was cutting off debate, but he granted the floor to Dr. Zellner.

Dr. Zellner: "I would like to say it was my understanding of the Board of Governors' action is not quite the same as Dr. Day's. We had discussed this, and the Board felt we should delete this advertising, but we did not at that time because we had a year's contract. The Journal is not entirely dependent on its advertising as we are now subsidizing it, and if we delete this advertising and the revenue from exhibit space it will amount to five or ten cents each for the doctors of Florida. I think this boils down to whether you want to put your money where your mouth is."

Motion to delete the recommendation of the Reference Committee was defeated.

The Speaker stated that the House would now consider Dr. Anderson's motion to approve this portion of his report.

Dr. Moseley: "I remained at the microphone so I could come back and point out what Dr. Zellner has just told you. Within the past year, there is a variation in the financing of The Journal. We are not utterly dependent upon our advertising. I would like to move that this House of Delegates make up its mind—not just strongly recommend—because it is not fair to throw this back to your Executive group and the Editor and leave the onus of decision upon them. I move we delete the words, 'strongly recommend' and move that we 'do not.'"

Amendment was seconded and carried.

Dr. Anderson's motion to approve his report as amended was carried.

Resolution 65-3

Establishing Committees on Tobacco Orange County Medical Society

Whereas, The evidence that tobacco is undoubtedly harmful to humans, and

Whereas, This information has been accumulating in medical and scientific literature for years, and

Whereas, This knowledge has not been adequately presented to the age group where it is most effective in preventing the use of tobacco, namely, the school children, especially those in the fifth and sixth grades, be it therefore

RESOLVED, That the Florida Medical Association go on record as recommending to the component county medical societies that they establish a "Committee on Tobacco" whose express purpose will be to disseminate this knowledge to school children to encourage them not to use tobacco and to encourage those now using tobacco to discontinue its use.

Dr. Anderson: "Mr. Speaker, I move the adoption of this entire report, as amended."

Motion was carried.

Dr. Anderson expressed appreciation to Drs. Carithers, Dever, and Ferguson who complied the Council reports, and to the members of his Reference Committee, Drs. Karl B. Hanson, Karl R. Rolls, David W. Martin, and Edwin P. Preston.

The Vice Speaker, Dr. James T. Cook, assumed the Chair.

REPORT OF REFERENCE COMMITTEE NO. II

Public Policy

Dr. Madison R. Pope, Chairman: "Mr. Speaker, Mr. President, and Members of the House of Delegates: Your Reference Committee gave careful consideration to items referred to it and makes the following report:

"The Reference Committee considered the report of the Council on Allied Professions and Vocations and recommended that it be approved as printed in the Handbook with the exception of recommendation No. 6, page 22 of the Handbook, which should be amended to read, 'Act, in cooperation with the Florida State Pharmaceutical Association, on drug practices, particularly with respect to mail order drugs, in the Veteran's Administration Hometown Program, and adoption of an appropriate resolution for presentation to the American Medical Association House of Delegates.' The two supplements to the Council report, as submitted in the delegates' packets, were approved in principle.

"Mr. Speaker, I move the adoption of this portion of the report as amended."

No discussion; no objections; motion carried.

Council on Allied Professions and Vocations

JESSE W. CASTLEBERRY, *Chairman*

Council:

During the period covered by this report, the Council held two official meetings: July 26, 1964, and January 31, 1965, both meetings having been held in the Dade County Medical Association headquarters building, Miami. The purpose of the first meeting was to plan implementation of the committees' programs for the coming year, and that of the second, to prepare and adopt recommendations for

Reference Committee No. II members were Drs. Madison R. Pope, Lawrence E. Geeslin, W. Mahon Myers, Lee Rogers Jr., and Banning G. Lary.

presentation to the Board of Governors and House of Delegates. In addition, the chairman attended the Board of Governors meeting held at Sea Island, Georgia, September 24-26, 1964, to present and interpret actions of the Council to the Board.

In brief, the major activities of the individual committees may be summarized as follows. The Committee on Dentistry maintained contact with the Florida State Dental Society and transmitted several recommendations from that organization to the Council. The Committee on Law brought to final adoption a medicolegal interprofessional code and studied child abuse reporting and "Good Samaritan" legislation. The Committee on Medical Assistants maintained liaison with the Florida Medical Assistants Association and considered the effects of prescription telephoning by physicians' employees. The Committee on Medical Technologists studied proposed revisions of the state medical technology laws and carried out liaison with allied groups in that field. The Committee on Nursing held periodic meetings with a liaison committee of the Florida Nurses Association board of directors and represented the Association in nursing education advisory and other joint groups.

The Committee on Pharmacy guided to reality a medical-pharmaceutical interprofessional code and studied and made recommendations regarding drug labeling, the welfare drug vendor program, and Veteran's Administration drug practices. The Committee on Physical Therapy studied the supply of and demand for registered versus nonregistered physical therapists. The Committee on Religion, a new standing committee given such status in 1964, developed a program and made plans for implementation. The Committee on Veterinary Medicine maintained liaison with the Florida State Veterinary Medical Association and carried out cooperative projects particularly in the scientific area. No activities were reported by the Committee on X-Ray Technicians.

An important matter referred for consideration and implementation to the Council by the Board of Governors was Resolution 64-1, "Labeling of Drugs as to Expiration Date," which had been adopted by the House of Delegates in May 1964. After careful study of this resolution by the Council and its Committee on Pharmacy, and consultation with the Florida State Pharmaceutical Association, the Council recommends that the House of Delegates reverse its 1964 action and disapprove this resolution.

All recommendations which follow were adopted by the entire Council. Following each recommendation, the originating source or sources of the recommendation are shown.

Recommendations:

1. Adoption of the interprofessional Code for Physicians and Pharmacists in Florida. (Approval must yet be obtained from the Florida State Pharmaceutical Association). Committee on Pharmacy and Judicial Council)

2. Reversal of 1964 action, i.e., disapproval, of Resolution 64-1 "Labeling of Drugs as to Expiration Date" for the following reasons:

(a) Expiration dating of medication might be desirable at the direction of the physician on the basis of probable duration of therapeutic treatment, but the desirability of transferring to the prescription label, in all cases, the expiration date appearing on the market package is unsound and should only be used in the professional judgment or the prerogative of the pharmacist.

(b) Short term dating medication should be labeled and this is done as good pharmaceutical procedure.

(c) It is unnecessary to label long term expiration dating medication because (1) medicine should be taken as prescribed by the physician in the quantity prescribed; (2) this would encourage patients to believe that medication could be stored for future illness, especially if the medication were expensive, and (3) even long term dating does not mean that the medicine would retain its potency unless properly stored, which does not mean a damp, hot medicine cabinet. (Committee on Pharmacy and Council)

3. Study of the aims and objectives of the Association in co-sponsoring and co-editing the Bulletin of the Bureau of Professional Relations of the University of Florida College of Pharmacy. (Committee on Pharmacy)

4. Establishment by county medical societies of medical-pharmaceutical interprofessional committees to consider and resolve issues between the professions on local levels, and initiation of a procedure for referral of unresolved matters to the state joint interprofessional committee. (Committee on Pharmacy)

5. Study of the State Department of Public Welfare Drug Vendor Program by a committee of the Association, with resulting recommendations for necessary changes and improvements. (Council)

6. Act, in cooperation with the Florida State Pharmaceutical Association, on drug practices, particularly with respect to mail order drugs, in the Veteran's Administration Hometown Program, and adoption of an appropriate resolution for presentation to the American Medical Association House of Delegates.

7. Action to bring Florida pharmacy laws with respect to filling and refilling prescriptions, and particularly to telephone prescribing, to the attention of physicians and medi-

cal assistants. (Committees on Pharmacy and Medical Assistants)

8. (a) Encouragement of physicians to give sugarless substitutes to children in place of sweets,

(b) Provision of continued support to dental societies in working towards fluoridation, and

(c) Referral to the Advisory Committee to Blue Shield of a recommendation of the Committee on Dentistry that Blue Shield benefits be expanded to cover certain surgical procedures performed by dentists. (Committee on Dentistry)

9. Adoption of the Florida Professional Medico-Legal Code. (Approval must yet be obtained from the Florida Bar.) (Committee on Law)

10. Increased assistance by the Association to all recognized allied professions and vocations in improving and maintaining their favorable public image. It is suggested that careful efforts be made to place the physician and the allied professional on the same "team" whenever possible, rather than falling into a trap of taking an opposing position against an allied profession when a dividing issue is raised. (Council)

Florida Professional Medico-Legal Code

Introduction

Doctors of Medicine and Attorneys-at-Law through their close personal relationships to those they serve have established principles and ethics applicable to their respective callings. The physician must minister to his patient's needs in accordance with the high precepts of the Hippocratic Oath. The attorney as an officer of the courts is sworn to support the Constitution of the United States and of the states or state in which he practices. The attorney and the physician are both pledged to aid those in need. The attorney will not reject the cause of the defenseless or the oppressed nor delay any man's cause for gain to himself. The physician does not ever deny needed aid to those who cannot pay.

Each profession respects the honor and the calling of the other. Neither profession can tolerate corruption, dishonesty or intellectual misconduct. Each profession must mutually support in the ranks of the others those ethical concepts which each has found necessary for the public good. Both attorneys and physicians are vested with high responsibiliites and privileges to enable them to serve the public with honor and dignity. This code is not necessarily of a binding character nor can it be so detailed to cover every circumstance. It is a statement of ethical practices of each profession and constitutes the further recognition of the fact that the physician and attorney are drawn into steadily increasing association as members of the legal profession call with greater frequency upon their medical friends for scientific knowledge and for evaluation of facts so that the rights of individuals might be better understood before the various tribunals.

It is in this spirit that the Florida Professional Medico-Legal Code was prepared and adopted by the Florida Bar and the Florida Medical Association.

Attending Physician and The Patient

The patient's attending physician has an obligation to cooperate willingly with the patient's attorney in supplying those facts which are available only to the physician. The physician should willingly present these facts in a manner that the attorney can understand and determine the relationship to his client's cause. It is for the attorney to determine how and under what circumstances such facts are to be appropriately presented. The physician should carefully preserve his own original records and only with the express consent of his patient may he permit inspection or copying of relative portions or give information pertaining to them. A physician should never advise in the amount of damages a patient should seek to recover. His province is the extent, degree or percentage of illness, injury or disability or similar judgments based upon his professional knowledge of the case. The question of legal liability or evidence are the exclusive province of the attorney.

Attorney and His Client

The attorney, for the purpose of maintaining the causes confided to him, will employ such means only as are consistent with truth and honor and will never seek to mislead a judge or jury by any artifice or false statement of law or fact. He is sworn not to counsel or maintain any suit or proceeding which has appeared to him to be unjust or any defense except such as he believes honestly debatable. The attorney then is a single minded advocate for his client. He cannot represent both sides in the dispute. It is important that the physician understand the adversary system which has been developed in recognition of the fact that justice can usually be satisfactorily accomplished if the different contestants can present their claims to a neutral forum who can weigh the opposing claims. Testimony is given in the question and answer form. The testimony is weighed either by a judge or by an administrative tribunal and conflicts in testimony are studied. The attorney must understand that sometimes it is possible for medical men to vary honestly in their findings and treatment, in their evaluation of illness or injury.

Reports To Attorneys

Physicians should realize that the patient's legal rights often depend upon the promptness in providing the patient's attorney with such information as may be available. Delays in providing medical reports may prejudice the patient's opportunity, either as to settlement or disposal of the problem, and thus create further expense and worry and even the loss of important testimony. Witnesses may die or facts become obscure as time elapses. The attorney should realize that a detailed report is time consuming and some arrangements for remuneration must be made.

Conferences

Attorneys know approximately when a case is coming to trial. The physicians have been notified as to the time and there should be a conference before the trial relative to the common problems presented in a particular case. These conferences should be arranged when mutually convenient, each realizing that time is of the utmost importance to the other. The attorney who has complete knowledge of the case, with consideration of medical conflicts, if any, and the chances of pretrial settlement, should call for the conference. The physician should be obligated to point out anything which he believes will be helpful in presenting the patient's case as well as the weakness in the opposing medical theory or testimony. It is to the best interest of justice and fair presentation to require that there be a physician-attorney conference before the trial of the case. It is obvious that the attorney is less able to represent the best interests of his client where he has not had the advantage of full talks with the physician in advance of presenting his case.

Physician and Court Arrangements

It is the physician's obligation to be in court at the time requested. Courts and attorneys must appreciate, however, that the physician has unexpected responsibilities to his patients and that at times court room procedures must give way to humanitarian considerations, and the physician should be permitted to testify out of turn or at another time. Every effort should be made to determine when and approximately how long the doctor is needed in court. The doctor should be given as much advance notice as is reasonably possible so that he can arrange his professional affairs, and all should realize that true emergencies come first.

The Attending Physician and His Charge For Services In Connection With Litigation

It is proper and not unusual for an attorney to represent a client on a contingent fee basis. This client may

not be in a position to pay. The medical profession neither has nor seeks any similar arrangement. The charge of a physician can never be based upon a percentage of a patient's financial recovery because this might lead to suspicion that the physician witness was being partial in his testimony. Payments must take into consideration conferences, preparations or reports required or requested, travel costs and witness appearance.

The Attorney and His Direct Payment of Medical Fees

By his standard of ethics an attorney cannot maintain a suit or do anything to stir up strife or litigation. The question frequently arises whether he may advance cost of litigation on behalf of his client. He may do so ethically where such advances constitute a charge to the client and collectability is not contingent upon the outcome of the case. The attorney may on behalf of his client and as a charge to him pay the physician for such services as are related to the development of the client's legal rights and the charges made by the physician should be such as would be made directly to the patient were the latter to pay such bills himself. A specific understanding should be reached between the attorney and the doctor as to each individual case and no common pattern or practice is susceptible for a general statement. The attorney asks the physician to give substantial amounts of time and preparation of the case, detailed reports, telephone consultations, and frequently the client does not know of these and does not understand their significance. The attorney must explain these things to his client because they are related to the establishment of his legal rights rather than his medical care.

Cooperation by Attorney to Secure Physician's Payment

The physician must understand that there are cases when the attorney cannot guarantee payment. A physician may take care of a compensation case thinking that the injury may have arisen in the course of employment only to have the administrative body decide that the injury did not so arise. The physician may not be paid. The physician may have prepared opinion evidence which was not used despite the preparation by the physician. Sometimes physicians cancel appointments only to have their case settled out of court. The physician has no protection for his earned professional fees. The attorney should do everything reasonably possible to assure payment of the services rendered by another professional man in the manner in which he is concerned; however, he is no guarantor of payment.

Expert Testimony

There are degrees of expertness in medical testimony. Every physician is relatively expert in the field of medical testimony. Others have specialized training and experience in a particular branch of medical science. It is in this science that the term medical expert is more commonly understood and used. An expert medical witness may or may not have examined the patient. In the latter event he cannot testify as directly as the one who did treat him even though he is greatly qualified in this field. If he has not examined the patient, then he has to rely on either x-rays, observations of others or hypothetical questions. The attorney should realize that when a medical expert has not examined a patient he cannot offer opinion evidence which exceeds the facts contained in the hypothetical question put to him as the basis for his opinion.

Subpoenas

Sometimes occasions arise in which an attorney feels it necessary to subpoena a doctor. The physician may have stated that he does not wish to testify or that he has no opinion or the attorney thinks he is being deliberately uncooperative. Subpoenas present many problems: the physician receives only nominal compensation for the subpoena, and it never represents the reasonable value of the services involved or of the court testimony, or the time taken away from a physician's practice, nor does he have the time to study or review authorities in medical literature or do other specialized preparation in such circumstances. If a medical expert does not have a sufficiently adequate basis for opinion as to a particular litigant whom he did not observe, he cannot be compelled to offer an opinion before a court or administrative body. If he has an opinion, he is obligated to state such opinion. If he has observed the patient, he may be required to state the substance of his observation. The physician should be careful to state for the record that he has been subpoenaed, that he has not observed the patient, if such is the case, or that he has an insufficient basis on which to form a professional opinion. He will in some cases be presented with a hypothetical question. He then has two courses open to him—if he can answer the question he must do so; if he feels that it requires special study, or if he feels that the question does not contain sufficient facts, he should so state. The excuse of an emergency happening must be actual for the physician, not a matter of mere convenience. The physician takes the risk of convincing the court that the emergency was of sufficient seriousness to justify ignoring the order of the court.

Medical Testimony

The treating physician when testifying as to his patient must offer the facts of his diagnosis, treatments and his prognosis. He should not indulge in speculation unless the case unavoidably requires it, and then he must clearly label his own testimony as speculative or indicate that it is to his best judgment. Under no circumstances is a medical witness justified in either suppressing evidence or taking sides. Such an attitude is an unwarranted assumption of the attorney's function. If the physician is testifying as an expert, he should not go beyond the facts of the case in stating his opinion, neither should he offer an opinion which goes beyond his personal knowledge, or runs counter to his professonal training and judgment. His professional judgment and his own conscience must mark the limits of his testimony including his opinion.

Statements by Physicians

The principle of adverse interests is not always understood by the physician who is trained only to think in terms of the patient's interest. Attorneys have ethical obligations—first, not to handle both sides of the case and second, not to deal with the parties of the other side except through their own attorneys. Sometimes unwittingly a physician offers opinion to both sides of a particular case and the interpretation of these opinions may vary with each attorney. It is easy to see that when a physician has been asked to offer his testimony on behalf of a particular claimant, he should not needlessly complicate the case by making himself available to representatives of the other side or by offering apparently inconsistent viewpoints to two or more parties or their attorneys. When a physician has agreed to testify for one party as an expert witness and is approached by the attorneys for the other party, then he must tell of his prior commitments, notify the attorney for his party with whom he has agreed to testify, and thereafter be guided by the latter attorney.

Efforts by Attorneys to Influence Medical Testimony

The attorney may properly point out the kind of medical evidence he needs to establish his case and the reasons for it, but this does not excuse him for trying to force or shape the physician's testimony. It must be remembered that any improperly presented medical testimony is almost always a bilateral product and one which is professionally unworthy of both the physician and the attorney. No ethical attorney is justified in abusing or badgering any witness, including a physician. Established rules of evidence give ample opportunity for testing the completeness or creditability of the medical witness and make unnecessary or unjustifiable recourse to any of the above devices of the cross-examining attorney. The

physician should inquire of the person conducting the hearing whether he is required to submit to such treatment.

Choice of Language by Medical Witnesses

To make his professional testimony clear both for the record, for the jury, and the attorneys on both sides (a medical witness should just express his findings and opinions in medical terms) the medical man should translate his opinions into easily understandable language. He should also put into intelligible language the effects of particular injuries. The latter is frequently easier than the technical statement of a diagnosis or of the treatment rendered. Members of the jury, unlike professionally trained listeners, are not expert in interpreting the medical vocabulary. The medical witness should remember that his testimony is intended to explain. If it does not explain, it has failed in the sense that it was not useful to the determination of the case.

Conclusion

Each of the professions has a duty to develop an enlightened and tolerant understanding of the other. The aims of the two professions are essentially parallel in their service to society. The public must first be considered and it is their interest which must be uppermost in all cases. Each profession must remember that individual practitioners vary in capacities and characteristics and that, while law and medicine may be termed sciences each is an inexact science and such inexactness is, and always will be, accented by the human limitations of its practitioners.

Revision or Amendment

Revision or amendment of this code shall be considered annually by the separate state associations involved, and shall be accomplished with the approval of the Board of Governors of the Florida Bar and the Board of Governors of the Florida Medical Association.

Interprofessional Code for Physicians (M.D.'s) and Pharmacists in Florida

In an effort to ensure that the health interests of the general public continue to be best served, the professions of medicine and pharmacy in the State of Florida adopt this interprofessional Code.

The provisions of this Code are not intended to replace or supersede the existing laws or Principles of Ethics governing either profession.

Prescriptions

A prescription is a continuation of the physician's management of the patient, and there should be no substitution of ingredients specifically named. It is the physician's duty to consider the patient's economic, as well as his physical condition, in the selection of the most effective medication available. Familiarity with, as well as adherence to, statutory restrictions regarding prescription and dispensing of both Class A and Class B narcotics, as well as Caution Legend drugs, by every physician and pharmacist is mandatory.

Complete and definite refill directions should be entered upon each prescription. No pharmacist should be expected or allowed to refill prescriptions without written or oral authorization by the prescribing physician. No pharmacist should prescribe medication. Should a pharmacist at any time suspect that an error has been made in writing the prescription, either as to the ingredients, the dosage or the directions, he should consult the prescribing physician in this regard, prior to dispensing the medication. Such consultation should be privately made, so that the interests of, and relationship between the patient, physician and the pharmacist are preserved.

The pharmacist should refrain from speculating upon the composition, the therapeutic uses and value, and any side effects, of prescribed medications or the propriety of the course of treatment. Such questions should be referred to the patient's physician.

The physician should not suggest or quote pharmacists' fees or the price of any medication to the patient, and the pharmacist should refrain from discussing physicians' fees.

Adequate explanation of the therapeutic value of expensive medication should be undertaken by both physician and pharmacist, in an effort to establish good public relations with the patient.

Freedom of Choice

Both professions must, at all times, afford the patient free choice of medical and pharmaceutical services, and do nothing to curtail or abridge this right. Patients should not be directed to a particular pharmacy by a physician, nor, conversely, to a particular physician by a pharmacist.

Information to Physicians

Physicians should avail themselves of information regarding drugs and prescriptions that the pharmacist will make readily available upon request.

Physician Ownership of Pharmacy and Dispensing of Drugs

Physican ownership of pharmacies, or physician dispensing of drugs, shall not be considered unethical, so long as there is no exploitation of the patient.

Privileged Communications

Information about a patient obtained from examination or discussion by a physician is privileged, and any information about a patient or his illness which a pharmacist may obtain or infer, shall also be considered in this category.

Since the activities of the professions of medicine and pharmacy affect and involve the patient, then in the furtherance of his best interests, as well as in the interest of improved interprofessional relationships, it would seem advisable that a joint meeting of representatives of the two professions be held annually, at both the local and state levels.

Agreements Between Pharmacists and Physicians

No agreements or arrangements can ethically exist between physicians and pharmacists which result in the exploitation of the patient or in a decrease in service to him. This includes rebates or any other mechanism which would encourage over-prescription or direction of prescriptions on the part of the physician.

Free rent privileges, or rental on the basis of percentage of the sales or fees charges, should not be entered into between physicians and pharmacists.

Physicians should not use prescription blanks containing advertising.

Complaints or Disputes

Any professional disagreements, whether on the part of a member of one of the professions or a local society, should be taken up through existing local society channels, and be referred to the state associations only if they cannot be resolved at a local level.

Revision or amendment of this Code shall be considered by the separate state associations involved, annually, and shall be accomplished with the approval of the Board of Governors of the Florida Medical Association and the Executive Committee of the State Pharmaceutical Association.

Dr. Pope: "The Reference Committee considered the report of the Council on Voluntary Health Agencies and recommends that it be approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Council on Voluntary Health Agencies

MASON ROMAINE III, *Chairman*

Council:

During the period covered by this report, the Council on Voluntary Health Agencies engaged in a variety of activities, all of which had the common objective of further refining and implementing the Association's program in this area. Formal Council meetings were held May 30, 1964, and January 7, 1965, with a subsequent meeting planned for May 1965. On January 8, 1965, the Council met jointly in Jacksonville with the American Medical Association Council on Voluntary Health Agencies. The major purpose of the latter meeting was to enable members of the AMA Council to gain first hand knowledge of the Florida program, which nationally is considered somewhat unique and of a pilot nature.

The following information concerning the Council's activities is reported by general subject.

(1) As in past years, the programs of the eight statewide voluntary health agencies officially recognized by the Association were re-evaluated, and no grounds were found for discontinuance of recognition for any individual agency. Pending applications from four other agencies were considered and studied carefully, with the result that official recognition was recommended for two (Florida Association for Retarded Children and United Cerebral Palsy of Florida). Recognition of these two agencies was granted by the Board of Governors in January 1965. The following organizations currently are recognized:

Florida Chapter, Arthritis Foundation
Florida Society for the Prevention of Blindness
Florida Division, American Cancer Society
United Cerebral Palsy of Florida
Florida Society for Crippled Children and Adults
Florida Heart Association
Florida Association for Mental Health
The National Foundation
Florida Association for Retarded Children
Florida Tuberculosis and Respiratory Disease Association

(2) Close liaison was maintained with the executive directors of the recognized agencies and with the officers of the Florida Voluntary Health Agencies Coordinating Committee. A portion of the Council's January 7 meeting was devoted to a conference with the directors to discuss individual agencies' problems and matters of mutual interest. While the coordinating committee is an informal body lacking responsibility and authority, as it was designed, some tangible evidence of its influence has come about in the form of cooperation between agencies in purchasing services from one another and in sponsoring common projects. The agencies also will cooperate in holding a 1965 summer educational institute for volunteers and staff. The Council assisted in the planning and will help, along with the Florida Institute for Continuing University Studies, in making the institute successful.

(3) Through the Council's efforts, an advisory committee on the voluntary health organization law was established by the Secretary of State in November, 1964. This committee, which has held several meetings, includes representatives of the Council, the voluntary health agencies, State Board of Health, and the public at large. Its function is to study and advise upon the present law, make recommendations relative to its administration, and consider necessary new legislation.

(4) Consideration was given to ways and means of achieving increased implementation of the Council's resolution endorsing favorable publicity for physicians engaged in voluntary health agency activities which was adopted by the House of Delegates in 1964. Some positive steps were developed in conjunction with the Public Relations Officer of the Board of Governors.

(5) Continuing study was given to United Health Foundations, Inc., United Funds, and their relationship to and effect upon the voluntary health movement.

(6) Considerable time was spent in developing a series of objectives or goals for the Association's program and the Council. These objectives were incorporated along with suggested goals for a county medical society committee on voluntary health agencies, into a new publication for county societies, which was approved by the Board of Governors. It is the Council's plan to prepare later publications for the individual physician and for the general public. Recommendations concerning establishment of local committees and their objectives will follow this report. It is further planned to invite all local chairmen to attend a future joint meeting with the Council.

(7) As indicated earlier, close liaison was and is maintained with the AMA Council on Voluntary Health Agencies. This relationship is greatly aided by the chairman of the Florida Council holding current membership on the AMA Council. Valuable information is exchanged between the two groups.

Recommendations:

1. Approval of the following objectives of the FMA Council on Voluntary Health Agencies:

(a) To improve mutual relationships between Florida physicians and voluntary health agencies.

(b) To evaluate this state's laws affecting voluntary health agencies and to expedite their proper administration.

(c) To ascertain that the voluntary health agencies are conducting their programs in conformity with their stated goals and in the public interest.

(d) To encourage closer cooperation and avoidance of duplication of effort between agencies through continued functioning of the Florida Voluntary Health Agencies Coordinating Committee (a voluntary joint coordinating body consisting of the executive directors of the major statewide agencies which was established in 1963).

(e) To serve in a liaison between the American Medical Association Council on Voluntary Health Agencies and the county medical societies in Florida.

(f) To collect and provide to the medical profession up-to-date, accurate information concerning voluntary health organizations.

(g) To serve in an advisory capacity to the Florida Medical Association regarding matters and problems concerning voluntary health agencies.

(h) To evaluate and recommend to the Board of Governors recognition of Florida voluntary health agencies.

(i) To cooperate with the statewide voluntary health agencies.

(j) To cooperate with the statewide voluntary health agencies and/or other sponsoring agencies in holding the annual Institute for Voluntary Health Agencies.

(k) To encourage and evaluate professional educational activities by voluntary health agencies.

2. That each county medical society not having such a committee be requested to establish a Committee on Voluntary Health Agencies, with the following suggested objectives and functions:

(a) Become informed on the stated purpose, organizational pattern, and program of each health agency represented within the jurisdiction of the medical society.

(b) Acquaint the medical society members with the information obtained so they may inform their friends and patients correctly.

(c) Offer liaison through appropriate medical society committees in order to strengthen the scientific programs of health agencies.

(d) Offer the consultation of appropriate medical society members to all health agencies to foster a medically correct and an ethically acceptable program.

(e) Encourage health agencies to select physicians for membership on the governing bodies from among medical society members in good standing, or from a panel of members submitted by the medical society as suggested nominees.

(f) Help physicians serving health agencies to recognize their variation in role with variation in circumstance, particularly that only a physician appointed by a medical society can be the official representative of that society.

(g) Improve mutual relationships between local and voluntary health agencies.

(h) Ascertain that local health agencies are conducting their programs in conformity with their stated goals and the public interest.

(i) Encourage closer cooperation and avoidance of duplication of effort between agencies through joint meetings of local agency personnel.

(j) Serve in a liaison capacity between the Florida Medical Association Council on Voluntary Health Agencies and physicians of the local medical society.

(k) Advise the county medical society regarding matters concerning voluntary health agencies.

(l) Stimulate physicians to participate in voluntary health agencies.

(m) Encourage and evaluate local professional educational activities by voluntary health agencies and foster cooperation in this regard.

Dr. Pope: "The Reference Committee considered the report of the Council on Medical Services and recommends that it be approved as printed in the Handbook with the exception of recommendation No. 19, page 28 of the Handbook, which should be amended by omitting the words 'Minute Men society' and substituting the word 'group.' The supplemental report of the Committee on Maternal Health was approved in principle.

"Mr. Speaker, I move the adoption of this portion of the report, as amended."

No discussion; no objections; motion carried.

Council on Medical Services

IRVING E. HALL, *Chairman*

Council:

The Council held two formal meetings during the period covered by this report: August 9, 1964 and February 21, 1965. The former meeting was devoted largely to planning of the Council's and the individual committees' programs; the latter to consideration of the committees' activities and recommendations and preparation of the Council's annual report. Several Council recommendations from the August meeting were submitted to and acted upon by the Board of Governors in its meeting of September 24-26, 1964, and these will be so indicated in the Council's recommendations which conclude this report.

The great majority of the Council's 12 Committees carried out or continued active programs. Written reports were received from a majority of the Committees. A detailed listing of the many activities of the various committees would be voluminous. Complete information relative to any individual committee's program will gladly be furnished upon request. Especially noteworthy were the activities of the Committee on Child Health in its capacity as School Health Medical Advisory Committee to the State Department of Education and State Board of Health, the Committee on Hearing in developing and encouraging screening and treatment programs in its field, the Committee on Maternal Health in continuing and refining the state maternal mortality survey, the Committee on Mental Health in keeping abreast of and providing medical advice in fast-moving legislative and planning developments, the Committee on Public Health in initiating a variety of programs and recommendations in its broad area, and the Committee on Aging for its positive approach to problems of the elderly.

An important new focus of Association attention receiving the Council's consideration was mental retardation, a subject which has been informally assigned in the past to the Committee on Mental Health and/or the Committee on Child Health. In view of the increasing concern and activities in this rapidly changing field, and noting the recent creation by the Board of Governors of an Ad Hoc Subcommittee on Mental Retardation, it was the Council's opinion that this Committee should be given standing committee status as part of the Council, where necessary close liaison with other appropriate committees may be maintained.

Each of the following recommendations was considered and adopted in the form presented by the entire Council. For the purpose of easy reference for further background information, the originating committee or other source is shown with each recommendation.

Recommendations:

1. Amendment of the Association's by-laws to provide for the establishment of a standing Committee on Mental Retardation as part of the Council on Medical Services. (From Council)

2. Following completion of a pilot survey of nursing homes being carried out by the Orange County Medical Society, that other county medical societies in the state be requested to carry out similar surveys. (From Committee on Aging)

3. Following promotion and implementation of comprehensive home care programs in certain areas on a pilot basis, that the Woman's Auxiliary to the Association be requested to undertake as a project the establishment of homemaker services throughout the state. (From Committee on Aging)

4. That the Association be made aware of a serious threat to local or community control of blood banking being made by a national pseudo-governmental organization. (From Committee on Blood)

5. That the Association reaffirm its opposition to any financial mechanism which provides for monetary payment for settlement of blood indebtedness, as it would destroy the voluntary donor philosophy and impose insurmountable problems on community blood banks. (From Committee on Blood)

6. That county medical societies be requested to retain membership of committees on emergency medical service for at least three years and, in accordance with a recommendation earlier approved, to consolidate these committees with advisory committees to Selective Service. (From Committee on Emergency Medical Service)

7. That the State Board of Health be requested to implement the hearing testing program recommended and submitted in 1963 by the Committee on Hearing. (From Committee on Hearing)

8. Clarification by the Board of Governors of the relationship of the Florida Crippled Children's Commission to the indigent hard of hearing child and the solution of the entire problem of the care of such children. (From Committee on Hearing)

9. Implementation of a joint study by the Committee on Hearing, the Florida Speech and Hearing Society, and the Hearing Aid Dealers Association of Florida to determine how best to care for the hard of hearing patient needing a hearing aid. (From Committee on Hearing)

10. Approval of the "Guide to the Practice of Sound Obstetrics" as proposed by the State Board of Health in conjunction with the Association, the Florida Academy of General Practice, and the Florida Obstetric and Gynecologic Society. (From Council but earlier has been reviewed and approved by Committee on Maternal Health)

11. With the knowledge that Florida has always stood high in the incidence and death rate of tetanus, that county medical societies and health departments study the problem, determine where they stand in relation to other counties, and consider development and co-sponsorship of appropriate community-wide tetanus immunization programs for all age groups in their respective counties. (From Committee on Public Health)

Approved by Board of Governors, September 25, 1964.

12. With respect to venereal disease:

(a) There be improved reporting by physicians to the

health departments of venereal disease cases, particularly infectious primary and secondary syphilis.

(b) There be improved cooperation between private physicians and health departments of contacting follow-up cases.

(c) There be improved, augumented cooperative efforts in carrying out educational programs pertaining to venereal diseases, especially in the schools, and

(d) A request be made for additional funds to provide for employment in health departments of increased personnel responsible for venereal disease investigation in order to provide improved case finding and follow-up. (From Committee on Public Health).

Approved by Board of Governors September 25, 1964.

13. Adoption of the following policy statement:

The Florida Medical Association recognizes the need for providing laboratory and diagnostic work for indigent patients living in areas not covered by local programs.

The Association sees the best solution to this problem in passage of the request for the appropriation of state funds for the operation of programs authorized under Chapter 401, F.S., provided that the appropriations act place no restriction on the use of such funds which would prevent their use for outpatient diagnostic and treatment services.

It is recommended that the Association's Committee on State Legislation be requested to do everything possible toward this end. (From Committee on Public Health)

14. Adoption of the following policy statement:

That county medical societies recognize smoking among minors as a problem which deserves their attention and take measures to introduce preventive programs and further that they be referred to the Florida Committee on Smoking and Health for additional information. (From Committee on Public Health)

15. Adoption of the following policy statement:

The Florida Medical Association views with concern federal and state legislative action under consideration, or which may be considered, that would remove from the State Board of Health the primary responsibility for the prevention and control of air and water pollution. It opposes such action and recommends a continuation and strengthening of the State Board of Health responsibility, this to be carried on with the guidance and advice of advisory committees, agencies and professional bodies concerned. (From Committee on Public Health)

16. That county medical societies not having rural health committees be requested either to appoint a committee or designate a member to be responsible for activities in this field. (From Committee on Rural Health)

17. That county medical societies be encouraged to sponsor exhibits at county fairs and cooperate with and assist school authorities in staging science fairs. (From Committee on Rural Health)

18. To insure safe water supplies to rural dwellers, that consideration be given to encouraging county-wide and district water supplies and sewage collecting systems. (From Committee on Rural Health)

19. Encouragement for the organization of a group whose members would be readily available to assist physicians in rural areas during emergencies. It is suggested that "flying physicians" might become a nucleus for such a standby group. (From Committee on Rural Health)

20. That emphasis be given to the responsibility of each rural family in promoting the health and fitness of all its members. (From Committee on Rural Health)

21. That county medical societies in rural areas place continuing emphasis on health education, rural environment control, eradication of animal-man diseases, immunization and accident prevention. (From Committee on Rural Health)

Supplemental Report

COMMITTEE ON MATERNAL HEALTH

JAMES M. INGRAM, *Chairman*

The Florida Medical Association in 1960 authorized its Committee on Maternal Health to conduct an annual Maternal Mortality Survey. Following a year of preparation, surveys have been conducted annually since 1961.

Data on each death are collected primarily by questionnaire and written narrative report, often supplemented by personal interview. Each death is then reviewed by all five members of the Committee and classified, on the AMA National Classification System, by diagnosis and by factors of preventability and responsibility.

Individual death files are promptly transcribed to unidentified code sheets, and the original files are destroyed. The code sheet information is transferred to machine data cards, which are kept as permanent records. A yearly summary and study of maternal deaths in the state are published in The Journal of the Florida Medical Association. Current state laws to not allow a written critique of each death to be sent to the attending physicians. The results of the first three years of study are as follows:

Maternal Mortality per 10,000 Live Births

Florida	1959	5.5
Florida	1960	4.6
Florida	1961	4.3
Florida	1962	4.7
Florida	1963	3.3
South Atlantic States	1960	5.14
United States	1962	3.0

Classification by Diagnosis

130 Maternal Deaths, 1961-63

I. Direct Obstetric Causes

A. Hemorrhage—51
B. Toxemia—14
C. Infection—23
D. Vascular Accidents—23
E. Anesthesia—8

II. Indirect Obstetric Causes

A. Cardiac Disease—2
B. Vascular Disease—2
D. Urinary Tract Disease—2
E. Hepatic Disease—1
H. Others—2

III. Non-Related Causes

F. Accidental—2

Factors of Preventability and Responsibility

Factors of Preventability—130 Deaths

None—72
Patient—34
Physician—16
Patient and Physician—7
Hospital—1

Factors of Responsibility—130 Deaths

None—68
Patient—38
Physician—14
Patient and Physician—8
Hospital—2

Dr. Pope: "The Reference Committee recommends approval of Resolution 65-7, Medicine and Religion, by the Orange County Medical Society, as printed on page 57 of the Handbook.

"Mr. Speaker, I move the adoption of this resolution."

No discussion; no objections; motion carried.

Resolution 65-7

Medicine and Religion
Orange County Medical Society

Whereas, Physicians are keenly aware of the importance of the spiritual welfare of their patients as a requisite for health and healing, and

Whereas, The American Medical Association has emphasized this point by the establishment of a Department of Medicine and Religion, be it

RESOLVED, That the county medical societies of the Florida Medical Association each be urged to establish a Committee of Medicine and Religion to promote cooperation between the physicians and clergymen in their respective areas in the matter of total patient care.

Dr. Pope: "The Reference Committee recommends approval of Resolution No. 65-8, Prescriptions for Veterans, by the Orange County Medical Society, as submitted in the delegates' packets.

"Mr. Speaker, I move the adoption of this resolution."

No discussion; no objections; motion carried.

Resolution 65-8

Prescriptions for Veterans
Orange County Medical Society

Whereas, The Veterans' Administration in Florida has withdrawn prescriptions from local pharmacists engaged in free enterprise, who have rendered valuable service to veteran patients,

Whereas, The Veterans' Administration has requested a veteran to have his prescription mailed away to their pharmacy which is unable to maintain the same close doctor-pharmacist-patient relationship which local community pharmacists have provided for many years, and which is so necessary to the patient's welfare,

Whereas, The Veterans' Administration has asked a veteran to wait two weeks for an antibiotic preparation,

Whereas, The Veterans' Administration Dispensary is allowed to refill prescriptions when pharmacists in the patient's own community must obtain new prescriptions under this program.

Whereas, The Orange County Medical Society is vitally interested in the health care of all citizens, including veterans, and holds that veterans are entitled to the same privilege of personalized local community health care according to the same high standards as enjoyed by other citizens,

Whereas, These policies are basic changes in force nationwide, and originating in the Veterans' Administration in Washington, D. C., and

Whereas, Pharmacists have made every effort, locally and nationally, to obtain correction of these deficiencies without results, and have requested the help of physicians in this matter, be it therefore

RESOLVED, That the Orange County Medical Society request the Florida Medical Association to declare support for the Florida Pharmaceutical Association in this matter, and to forward a resolution asking the American Medical Association to join with the American Pharmaceutical Association and the National Association of Retail Druggists in seeking these necessary changes by the Veterans' Administration.

Dr. Pope: "Mr. Speaker, I move the adoption of the Committee's entire report as amended."

No discussion; no objections; motion carried.

Dr. Pope thanked the members of his Committee, Drs. Lawrence G. Geeslin, Banning G. Lary, W. Mahon Myers and Lee Rogers Jr.

The Speaker, Dr. Franklin J. Evans, resumed the Chair.

REPORT OF REFERENCE COMMITTEE NO. III

Finance and Administration

Dr. William C. Thomas Sr., Chairman: "Mr. Speaker, Mr. President, and Members of the House of Delegates: I feel rather honored to speak to the House of Delegates once again. I am going to reverse the order of those chairmen who have reported before me and take this opportunity to thank our most efficient secretary, who sat with us until five o'clock in the afternoon, and the members of the Committee, Drs. George W. Morse, Eugene B. Maxwell, David W. Goddard, and Richard M. Fleming.

"Your Reference Committee gave careful consideration to the items referred to it and makes the following report:

"The Reference Committee approves the report of the Board of Governors with the deletion on page 35 of the Handbook of Recommendation No. 4 and Recommendation No. 6.

"With reference to Recommendation No. 6, recognizing that the Florida law on the Practice of Medical Technology leaves many things to be desired and should be improved upon, and that the proposed law has not been thoroughly studied, the Reference Committee recommends that the proposed Florida Law on the Practice of Clinical Laboratory Science be referred to the Committee on Medical Technology for study and change, and that a report be presented by that Committee to the Florida Medical Association House of Delegates at its meeting in 1966.

"Mr. Speaker, I move the adoption of this portion of the report, as amended."

No discussion; no objections; motion carried.

Drs. William C. Thomas Sr., George W. Morse, Eugene B. Maxwell, David W. Goddard and Richard M. Fleming composed Reference Committee No. III.

Report of the Board of Governors

SAMUEL M. DAY, *Chairman*

The Board of Governors held four formal meetings during the Association's administrative year. They were held on May 10, 1964, September 24, 25, 26, 1964, January 9, 1965, and March 14, 1965.

The voluminous activities of the Association with over 180 active programs continued to increase with the resulting responsibility and demands upon the time of the officers, Board of Governors, Councils and Committees. The Chairman would be remiss if he did not take the opportunity to thank each and every physician who gave of his time and energies during the year to the benefit of the Association. It has been one of the Chairman's greatest rewards to have the opportunity of being associated with them.

MAJOR ACTIVITIES

ANNUAL MEETING. — The Board approved the program and schedule for the 1965 annual meeting submitted by the Committee on Scientific Work. The scientific program again this year will be presented in cooperation with a number of specialty groups. The Board further approved the recommendation for scientific color television programs to be presented in cooperation with Smith, Kline, and French Laboratories.

PRESIDENTS' AND SECRETARIES' CONFERENCE. — A Seventh Annual Conference of Presidents and Secretaries of county medical societies was held on January 23-24, 1965 in Orlando, Florida. The purpose of this conference was to orient the officers of the county medical societies regarding the major programs and activities of the Association to enable their programming and implementation at the county level. Again this year, the attendance was excellent with over 95% of the FMA represented by their county officers.

FINANCIAL STATEMENT AND BUDGET. — The Board carefully reviewed the financial statement prepared by the Secretary-Treasurer and the Executive Director; and the Auditors statement prepared by the Association's certified public accountant for the Association's fiscal year which was the calendar year 1964. In 1964, the Association had an income from all sources of $288,176; total expenses incurred including on inventory adjustment of $250,206 for a net excess of income over expenses of $37,970. The Board approved an annual operating budget for the calendar year 1965 in the amount of $290,000 which included $25,000 for reserve and expenditures for the completed building and additional property which has been recently acquired. In compliance with the By-Laws, this budget was presented by the Executive Director after consultation with the Secretary-Treasurer, it was reviewed by the Executive Committee and approved by the Board of Governors and was based on an anticipated income of $290,000. Copies of the CPA audit are on file in the Association's office and available for review to members of the Association.

CALLED MEETING OF THE HOUSE OF DELEGATES. — Upon the recommendation of the Executive Committee, the President called a special meeting of the House of Delegates on February 21, 1965. The proceedings of this meeting appear in the April 1965 issue of The Journal.

APPOINTMENTS. — On May 10, 1964, the Board appointed Reuben B. Chrisman Jr., M.D. as an AMA delegate to serve on the Board of Governors; Leo M. Wachtel, M.D. as the State Board of Health delegate of the Board of Governors; approved the present appointment of Edward G. Cole Jr., M.D. as Public Relations Officer; approved the appointment of Robert E. Zellner, M.D. as the optional member of the Executive Committee; reappointed the members of the Committee on Research with Karl B. Hanson, M.D. as Chairman; reappointed Thad Moseley, M.D. as Editor of The Journal; accepted the Editor's nominations and appointed John M. Packard, M.D., Franz H. Stewart, M.D., and Oscar W. Freeman, M.D. as the Assistant Editors of The Journal; appointed Jack Q. Cleveland, M.D. as the Assistant Editor from the Board of Governors; reappointed the subcommittees on the Florida Medical Foundation, Inter-American Relations, Quackery, Venomous Snake Bite, and appointed an Investment Plan Committee, ad hoc committee on Podiatry, Mental Retardation and an ad hoc committee to study the future of The Journal.

RECOGNITION. — The Board reviewed the nominations received from the county medical societies and selected the recipient for the A. H. Robins Company Award "for outstanding community service by a physician," to be presented at the first meeting of the House of Delegates, April 22nd (Award nominations will be included in the delegates packets). The Board awarded Honorary Memberships in the Florida Medical Association to Dan C. Ogle, M.D., St. Petersburg, and George T. Pack, M.D., New York City.

REFERRALS BY HOUSE OF DELEGATES

The Board reviewed Resolution 64-21 referred by the House of Delegates to the Board which contained the invitation of the Duval County Medical Society to hold an annual meeting in Jacksonville. The Board, after careful consideration, recommended that the dates and locations be confirmed through 1970, and to explore the possibility of having a meeting in Jacksonville in 1971. The annual meeting schedule approved is as follows:

May 11-15, 1966 — Hollywood
May 10-14, 1967 — Bal Harbour
May 8-12, 1968 — Hollywood
May 14-18, 1969 — Bal Harbour
May 6-10, 1970 — Hollywood

The Board reviewed Resolution 64-2 regarding seating alternate delegates in the second meeting of the House of Delegates referred to the Board for study and recommendations.

The Board unanimously agreed to recommend to the House of Delegates disapproval of this proposal.

The Board reviewed Resolution 64-19, a proposal for a new approach to Florida's Medical Scholarship Program which was referred to the Board of Governors for their study and action. The Board unanimously agreed that the subject of this resolution not be implemented by taxes on physicians and recommended that the Committee on Physician Placement review the current state scholarship program and make recommendations for its abolition or means by which it might be improved. The Committee was further requested to explore the over-all program of medical scholarships and loans for medical students and make recommendations to the Board.

The Board considered recommendation number 13 of the Council on Medical Services report which was transferred to the Board of Governors for review and action by the House of Delegates regarding the establishment of a department or division on mental health under the direction of a qualified psychiatrist. The Board requested presentations from the Florida Psychiatric Society, Florida Pediatric Society, Academy of General Practice, and State Board of Health and received comments from other individual physicians. The Board on September 26, 1964, adopted the following policies:

1. An expression of appreciation to the Interim Legislative Council Committee on Mental Health and Mental Retardation for consulting the Florida Medical Association regarding the proposed legislation establishing Divisions of Mental Health and Mental Retardation.

2. It is the consensus of the Board that IT WOULD BE IDEAL TO HAVE ALL HEALTH RELATED ACTIVITIES UNDER THE SUPERVISION OF ONE HEALTH AGENCY AND THAT THE DIVISIONS OF MENTAL HEALTH AND MENTAL RETARDATION BE WITHIN THE FRAMEWORK OF THE STATE BOARD OF HEALTH; AND THAT THIS INCLUDE THE STATE INSTITUTIONS LISTED IN ITEM 4-b.

3. It is the opinion of the Board that the proposals contained in the legislative drafts thus far presented do nothing to further the welfare of the patients concerned in the State of Florida and add nothing materially to the present arrangement, but rather tend to fragment medical services in Florida further. Many deficiencies were noted in the drafts of the bills. The Board of Governors of the Florida Medical Association goes on record against the proposed bills as presently constituted. (Final Committee Draft No. 1 and No. 2, dated 9/18/64).

The Board also suggested an alternate proposal if it was impossible to transfer the state institutions to a Division of Mental Health and Mental Retardation in the State Board of Health; establish a "Board of Health Institutions" under the State Cabinet and responsible to the Cabinet to be appointed by the Governor. The Board of Health Institutions should be composed of qualified members representing the medical profession, the State Senate, the State House of Representatives, and others.

The Board adopted the clarification of policy regarding mental health at its meeting on January 9, 1965 which reads as follows:

1. We recommend that a long range plan be undertaken to bring all health related activities under a single health agency; that this health agency be under the direction of a Board, with adequate representation of Doctors of Medicine; it is further recommended that the divisions of this agency should be under the direction of appropriately qualified Doctors of Medicine with appropriate medical advisory committees.

2. Consistent with this recommendation, it is recommended that at the next session of the Florida Legislature a bill be enacted providing that a Division of Mental Health be organized in a vertical direction, providing both hospital and community mental health out-patient services and that this Division of Mental Health be under the direction of a qualified psychiatrist.

COUNCIL AND COMMITTEE REPORTS

The Board had the opportunity and the privilege of working closely with the Councils and Committees and in coordinating their activities and implementing the policies of the House of Delegates. The Board on March 14 carefully reviewed and edited all Council and Committee reports to be transmitted to the House of Delegates in the Delegates' Handbook. The complete reports as submitted by the Councils and Committees will be available at the Reference Committee meetings. Specific actions regarding recommendations of the Councils during the year are as follows:

COUNCIL ON ALLIED PROFESSIONS AND VOCATIONS. — 1. Amended and adopted the proposed Florida Professional Medico-Legal code and recommended its adoption by the House of Delegates. (Entire code in delegates' packets).

2. Considered the interprofessional code for physicians and pharmacists in Florida; referred it to the Judicial Council for its consideration and amendments and approved the revised draft and recommended its adoption by the House of Delegates. (Entire code in delegates' packets).

COUNCIL ON MEDICAL ECONOMICS. — 1. That the 1962 Florida Relative Value Studies be adhered to as would be applied to the $7,500 income level Blue Shield contract when issued and the high level Federal Employees' Contract.

2. That a letter from the Board of Governors be sent to members of The Florida Medical Association giving adequate information concerning the background and explaining the reasons for its specific application in this contract prior to its issuance. This applied specifically to the request of Blue Shield that a new item in the schedule be added — obstetrical delivery including postpartum care 25 units — which was disapproved. The current schedule provides for 20 units.

3. That the items regarding follow-up days and individual consideration items be approved as requested.

4. The Board of Governors requested the Blue Shield Board of Directors that all present existing Blue Shield Contracts which do not conform to the 1962 Florida Relative Value Studies be replaced or rephrased in this respect as soon as is practical.

NOMINATIONS

CERTIFICATE OF MERIT. — Your Board recommends that Robert B. McIver, M.D., of Jacksonville be awarded the Association's Certificate of Merit. (Complete nomination will be included in the Delegates' packets.)

CERTIFICATE OF APPRECIATION. — Your Board recommends that Thomas C. Kenaston Sr., M.D., of Cocoa be awarded the Association's Certificate of Appreciation. (Complete nomination will be included in the Delegates' packets.)

COMMITTEE ON MEMBERSHIP AND DISCIPLINE. — As provided for in the By-Laws, the Board of Governors nominates the following physicians for those terms expiring in 1965:

District 4	Jack Q. Cleveland, M.D., Miami	1969
District 8	William C. Thomas Sr., M.D., Gainesville	1969

District 9	James T. Cook, M.D., Marianna	1969
District 10	C. Frank Chunn, M.D., Tampa	1969
District 11	Thomas C. Kenaston, Sr., M.D., Cocoa	1969
District 12	Edward L. Cole Jr., M.D., St. Petersburg	1969

BLUE SHIELD BOARD OF DIRECTORS. — The Board of Governors reviewed the nominations for the Blue Shield Board of Directors, presented by the Blue Shield Nominating Committee, and from the nominations for each physician directorship the following were chosen:

Medical District "A"
Three Year Term
Henry J. Babers Jr., M.D., Gainesville
Hugh A. Carithers Jr., M.D., Jacksonville

Medical District "C"
Three Year Term
W. Dean Steward, M.D., Orlando
Myrl Spivey, M.D., West Palm Beach

Medical District "D"
Three Year Term
L. Washington Dowlen, M.D., Miami
John D. Milton, M.D., Coral Gables

At Large
Three Year Term
A. T. Kennedy, M.D., Pensacola
Robert E. Zellner, M.D., Orlando

The two lay members nominated by the Nominating Committee were approved by the Board as follows:

District "C"
Three Year Term
C. DeWitt Miller, Orlando

At Large
H. P. Osborne Jr., Jacksonville

RECOMMENDATIONS

1. BY-LAWS. — After careful consideration, the Board of Governors recommends to the House of Delegates the following amendments to the current By-Laws of the Florida Medical Association, Inc.:

a. Chapter I, Section 1, paragraph 1 be amended to read as follows:

"Any doctor of medicine may be accepted into membership in the Florida Medical Association, Inc., upon certification by the secretary of his component society that he is a member in good standing of that society, provided such certification is accompanied by remittance of all required fees, dues, assessments and an archives data form."

b. Chapter I, Section 2, subsection 2 be amended to read as follows:

"Life Members. — Any member who has been an Active Member of the Association for thirty-five years or who is a Past President of the Association shall automatically qualify to become a Life Member and be exempt from all Association dues and assessments as long as he maintains membership in a component society."

c. Chapter IV, Section 6, paragraph 2 be amended to read as follows:

"The President, President-Elect, Vice President, Secretary, Treasurer, Immediate Past President, Speaker of the House of Delegates, Vice Speaker, Past Presidents, Members of the Council on Specialty Medicine, delegates to the House of Delegates of the American Medical Association, and any member of the Association who has held the office of President of the American Medical Association shall be members of the House of Delegates with full rights and privileges."

d. Chapter IX, Section 1, paragraph 7 be amended to read as follows:

"THE COUNCIL ON MEDICAL SERVICES: Committees on Aging, Blood, Child Health, Emergency Medical Service, Hearing, Indigent Care, Labor, Maternal Health, Mental Health, Mental Retardation, Public Health, Rural Health, and Vision."

e. Chapter XI, Section 3, be amended by adding the following paragraph:

"8. Unorganized Counties Assigned to Societies. The House of Delegates shall assign an unorganized county to a nearby county medical society upon recommendation of the Judicial Council. Such county medical society will aid and supervise in public health and medical questions in the counties so assigned, the same as for the county or counties named in its charter, until these counties are organized separately and hold their own county medical society charters."

2. RESOLUTIONS. — 1. Whereas, Blue Shield has been endorsed repeatedly by physicians as the doctors' voluntary health insurance plan, and

Whereas, Millions of people have been sold these Blue Shield plans knowing they were backed by physicians, and

Whereas, Physicians have contributed time and money to Blue Shield for development as well as implementation of these plans, and

Whereas, The House of Delegates of the American Medical Association adopted a resolution in December, 1948 which read in part "RESOLVED, that the American Medical Association urge, with moral support and where necessary, with financial assistance, every constituent state society to undertake the organization and operation of medical service plans covering the services mentioned above as expeditious ly as possible; . . . and

Whereas, The House of Delegates of the American Medical Association in June 1948 criticized the American Medical Association office for dropping Blue Cross coverage and stated, "We recommend that when the current contract expires (March 1949) that AMA cover its employees through Blue Cross and Blue Shield, which will then be available locally," and

Whereas, The AMA office has never subscribed to Blue Shield, and in 1964 cancelled coverage of employees through Blue Cross because of insignificant differences in coverage and premiums, thereby eliminating all possibility of obtaining Blue Shield coverage.

RESOLVED, That the House of Delegates of the Florida Medical Association notify the AMA officers and Board of Trustees that Florida doctors are displeased with the AMA cancellation of staff coverage by Blue Cross and are particularly displeased with the AMA's complete disregard of Blue Shield coverage; and be it further

RESOLVED, That the AMA office be requested to review in detail its experience under present coverage prior to renewing contracts, and be it further

RESOLVED, That Blue Shield coverage be strongly recommended for AMA employees, and be it further

RESOLVED, That the House of Delegates of the Florida Medical Association instruct its delegates to notify the House of Delegates of the American Medical Association of our position (stated above), and seek favorable action toward obtaining Blue Shield and possibly Blue Cross coverage of AMA employees.

3. STATEMENT OF POLICY. — That recommendations and legislative proposals dealing with health matters by representatives of the Florida Medical Association, its component county medical societies, recognized specialty groups and individual members be cleared through or coordinated with the appropriate officer, council or committee of the FMA.

4. MEDICAL ASSISTANCE FOR THE AGED. — a. That all MAA patients not be classified as indigents and that they have individual free choice of physician and that authorization for hospitalization be based on private physicians' recommendations.

b. That recipients of Kerr-Mills aid should not be required to be processed through tumor clinics, and that such recipients should have the privilege of retaining their private physicians whenever possible.

Dr. Evans: "You have passed the Board of Governors' report and I am sure you have noticed that the Board has designated certain awards to those members who have rendered outstanding service. The award to Dr. McIver was taken out of order at the first House of Delegates. At this moment, we have the Certificate of Appreciation

to present to Dr. Thomas C. Kenaston Sr. and I would like him to come forward and be escorted to the rostrum by his son, Dr. Thomas C. Kenaston Jr. and Dr. Joseph V. Von Thron.

"When you adopted this part of the report, the House of Delegates is awarding this certificate to Dr. Kenaston Sr.

"The Certificate of Appreciation is presented by the Florida Medical Association to Thomas C. Kenaston Sr., M.D., for outstanding services to the Association, to the medical profession, and to the public as set forth in the Principles of Medical Ethics."

Dr. Kenaston: "It has been an honor and a privilege, and I thank you."

Certificate of Appreciation

Whereas, Thomas Corwin Kenaston Sr., M.D., of Cocoa, a life member of the Florida Medical Association, has rendered invaluable service to the Association, to the medical profession, to the public and to his country, and merits special recognition for his achievements, and

Whereas, This distinguished physician, born in Butte, Nebraska, in 1903, attended the local high school, received the Bachelor of Arts degree from the University of Nebraska, and the degree of Doctor of Medicine from the University of Nebraska College of Medicine in 1927, and completed an internship at St. Luke's Hospital in Jacksonville in 1928, and

Whereas, This youthful physician entered private practice of medicine in Cocoa in 1929, was subsequently elected to various offices and eventually to the presidency of the Florida East Coast Medical Society, had available during this period the first x-ray machine, the first oxygen tent and the first electrocardiograph available to practitioners on the central East Coast, having at one time been directed by Dr. Paul Dudley White to utilize his cardiographic machine for use on patients as far south as Vero Beach, and

Whereas, This excellent physician served his country in World War II as a lieutenant commander in the Navy from 1943 to 1946 in the Pacific area and upon his return to Cocoa established the Kenaston Clinic, surrounding himself with excellent physicians and affording the first complete care by specialists to the Central Florida East Coast area, and

Whereas, This dedicated doctor, through his efforts, was able in 1941 to organize and help finance Wuesthoff Memorial Hospital, the first hospital in Cocoa, serving for fifteen years thereafter as its medical director, became during this period Brevard County's examining physician for selective service, examining physician for the athletic department of Cocoa High School, and president of the Brevard County Medical Society, represented that society in the Association's House of Delegates for many years in 1954 and 1955 served as Vice President of the Association, was until 1964 chairman of the Council on Allied Professions and Vocations, was for several years chairman of the State Nursing Committee and of the Advisory Committee to the State Department of Education on Associate Degree Nursing Program in Junior Colleges, and was appointed by Governor Farris Bryant as a member of the Advisory Committee on the Manpower Development Act, and

Whereas, This outstanding physician has had a prominent role in community affairs, including serving as president of the Cocoa Kiwanis Club, president of the Greater Cocoa Chamber of Commerce, president and chairman of the board of the Cocoa Beach State Bank, and for twenty years a vestryman of St. Mark's Episcopal Church in Cocoa; therefore be it

Resolved, That the Certificate of Appreciation, established in 1961 for the purpose of acknowledging exceptionally meritorious service and awarded now for the first time, be presented to this devoted member of the Association in recognition of his many contributions to the welfare of the Association, the state and the public.

Dr. Thomas: "The Reference Committee approves the reports of the subcommittees of the Board of Governors with a change on page 36 under FMA Investment Plan Committee, second paragraph, second line, of the word 'media' to 'medium'. The remainder of the reports are approved as printed.

"Mr. Speaker, I move the adoption of this portion of the report, as amended."

No discussion; no objection; motion carried.

SUBCOMMITTEES OF THE BOARD

Inter-American Relations. — The Subcommittee on Inter-American Relations, met during the past year on July 11, August 30 and October 11, 1964, and on February 7, 1965, and the following actions are reported:

1. As regards the Cuenca Project in conjunction with Project Hope in Ecuador — we have obtained a Chief of Staff, James B. Madison from Miami, who has organized the project from the standpoint of ancillary services and has done some orthopedic surgical work. We have supplied him with a microscope as requested by him, and are in the process of obtaining medical textbooks for this project. The physician recruitment has been disappointing; but corrective measures to increase publicity concerning the project have been undertaken and it is anticipated that physician recruitment will improve.
2. Regarding an independent project for the Association in Latin America — Two survey trips have been made to Central America and the site selection has been narrowed down to either Santa Rosa or Trujillo, in Honduras, Central America. A further survey trip is planned for the weekend of March 12 at which time final site selection should be made. Tentative promise of financial underwriting for this project has been obtained, and in the near future it is hoped to present a final prospectus to the Board of Governors for approval or disapproval of such a project.
3. The Committee has undertaken as a project the collection of information for the Board of Governors as to what individual projects already exist in Latin America among the membership of the Association. When this survey is completed it will be presented to the Board of Governors.
4. A questionnaire will be sent in the near future to the membership of the Association in regard to individual desire for possible Latin American service in the future.
5. The tour of South America in conjunction with the People-to-People Health Foundation was postponed from February until later in the year, owing to lack of interest on the part of the membership of the Association. Another attempt will be made to obtain physicians to make this tour in August.

The Chairman wishes to thank the members of the Subcommittee for their cooperation and support throughout the year.

FMA Investment Plan Committee. — The reorganization of the FMA Investment Plan and its transition from the original investment trust has been completed. Members of the Association may participate (1) as an individual with no tax advantage, (2) tax-free pension or profit sharing plan under Public Law 87-792, or (3) through a professional service corporation under Chapter 61-64, Florida Statutes.

Dr. Thomas C. Kenaston Sr. of Cocoa receives the Certificate of Appreciation for outstanding service to the Association, the medical profession and the public from Dr. Franklin J. Evans of Coral Gables, Speaker of the House of Delegates.

The First Bank and Trust Co. of Jacksonville serves as custodian for the plan, the funding medium is Loomis-Sayles Mutual Fund of Boston, and the insurance underwriter is Pan American Life Insurance Co. of New Orleans. All three of these organizations are performing to the satisfaction of your Committee.

Promotional information is being completed at the present time and a concerted effort to increase participation in the plan will be made during the next several months.

As of December 31, 1964, there were 103 participants in the program and the total value of the investment plan was $2,243,326.00.

Your Committee is firmly convinced that this plan offers an excellent insurance protection, investment and retirement opportunity for members of the Association with benefits not available to the individual physician.

Quackery. — The Subcommittee held its first official meeting February 20, 1965, with all but one member in attendance. As a result of a thorough discussion of the entire subject held at that meeting, the Subcommittee is pleased to report the following activities and recommendations.

1. As a necessary prerequisite to establishing a more definite program, it was decided that the term quackery should be clearly defined as applied in Florida. Consideration also was given as to whether or not the Subcommittee's scope included cultism and if so, to the possibility of recommending adding this term to the name. One of the Subcommittee members (Dr. Mickley) agreed to submit a compilation of definitions for further consideration by the entire Subcommittee in developing later specific recommendations.
2. In order properly to carry out its functions, it was felt necessary for the Subcommittee to establish special liaison with the Office of the Attorney General in the field of quackery. It was suggested that representatives of that office be invited to attend a future meeting of the Subcommittee. A recommendation on this point follows the summary.
3. It was decided that the informational file on quackery and cultism which has been maintained in the Association's Executive Office should be continued, but that the materials placed therein should be restricted to those incidents, activities and practices occurring within, or otherwise directly affecting, Florida. It was also decided that county medical societies, Better Business Bureaus of Chambers of Commerce, and other sources should again be invited to send in such information.
4. With respect to quackery within the medical profession, it was suggested that the Association should make increased efforts to provide legal assistance to county medical societies regarding proper and workable procedures for expelling and/or suspending members.
5. It was agreed that public education should be perhaps the most important eventual phase of the Subcommittee's activities, and that in the professional area its role should be limited to advice and investigation.

Recommendations:

That the Subcommittee on Quackery be authorized to establish special liaison with the Office of the Attorney General of Florida in the area of quackery.

The Subcommittee on Venomous Snake Bite has been making slow progress. Forms have been devised whereby IBM machine type of coordination of information can be evaluated. It is planned at the time of the Florida Medical Association Meeting to go through those that are available and try to gain some information. It is thought that this study should be continued over a minimum of a five year period and it is felt at this time we will have sufficient data to draw some significant conclusions. The long range plan consists of:

1. Proper identification of snake for evaluation of snakebite. This is by education and help through the newspapers and Sunday supplement to accomplish this in the various cities in Florida.
2. Cooperation of the physicians by accurate reporting.
2. Adequate coordination and evaluation of information obtained.

This clinical report will take time and laboratory research might make faster progress but this does not seem to be immediately available at my level in this community. Any cooperation that could be obtained from medical schools in our state would be greatly appreciated

Dr. Thomas: "The Reference Committee approves the request of the Florida Medical Political Action Committee to be allowed to bill for FLAMPAC dues at the time the county societies bill for AMA, FMA and county dues, the details of this billing to be worked out according to plans of states which have endorsed this plan. The Reference Committee strongly urges that the Board of Governors work out an arrangement with FLAMPAC officers so as not to jeopardize the tax-exempt status of the Florida Medical Association and/or the county medical societies.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Dr. Thomas: "The Reference Committee approves the President's Address as presented.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Dr. Thomas: "The Reference Committee approves the Remarks of the Speaker as presented at the first meeting of the House of Delegates.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Dr. Thomas: "The report of the Judicial Council is amended as follows: Paragraph three on page 38, beginning 'That any contract . . .' is amended by deleting the last portion of the first sentence, beginning with the words 'we would also like to reaffirm the ethic . . .' through the end of the sentence.

"The fourth paragraph, beginning 'The members of all three organizations . . .' is amended by deleting the last phrase beginning with the words, 'and where possible . . .' through the end of that paragraph.

"Paragraph six on page 38 beginning, 'Under the existing policy of the House of Delegates . . .' is amended to read as follows: 'Under the existing policy of the House of Delegates regarding osteopathy, the Judicial Council has determined that the Clay County physicians who are associating professionally with an osteopath are engaging in a practice which is contrary to the principles of practice of the Florida Medical Association; however, because of extenuating circumstances, no disciplinary action is recommended.'

"On page 40, Opinion No. 64-8, Partnership Arrangement, the Reference Committee does not agree with the statement as printed and recommends that this opinion be referred back to the Judicial Council for study.

"Mr. Speaker, I move the adoption of this portion of the report as amended."

Motion was seconded.

Dr. Jere W. Annis, Chairman, Judicial Council: "I would like to discuss the first paragraph of the Reference Committee's report. To delete this portion of the third paragraph of the report would be to take the teeth out of the job that the House of Delegates instructed the Judicial Council to do. You will recall a year ago, and even before that, the Judicial Council was instructed to implement this equalization of physicians—that they all be treated alike—so that all physicians would be paid on a fee-for-service basis. We did this to the best of our ability and we met with the three groups primarily involved, the anesthesiologists, the radiologists and the pathologists. It was the thought of the Council at that time that all three agreed to this, but yesterday at the Reference Committee meeting the pathologists said that officially their organization could not go along with the principle of splitting the fee into professional and technical components. Therefore, that next paragraph must be deleted which said that all three of these organizations did agree.

"I do not believe that the Reference Committee intended to delete the implementation of this policy. Therefore, I move that the second sentence of the Reference Committee report be deleted, which would just leave the words, "The report of the Judicial Council is amended as follows . . .' and then pick up the second paragraph."

Motion was seconded.

Dr. J. Maxey Dell Jr. of Alachua: "It would seem to me that the members of these three organizations, or at least the representatives of these organizations, agreed at the time. We believe the anesthesiologists and radiologists still believe this, and we would like to see our organizations left in, with just a notation that the pathologists no longer agree. Just as a matter of background, the radiologists realize that the practice of radiology is one that we have been trying to change for the past few years and we had hoped to get real help from the Florida Medical Association in doing this. The American College of Radiology has gone on record recently that they would like to see fees divided into professional and technical components. It is the only way you can really

carry out the true ethics of the FMA and the AMA."

Dr. Sanford A. Mullen, Council on Specialty Medicine: "We are only describing and discussing here the policies of organizations. The national and state pathology organizations have consistently over the years been opposed to the professional split. The only thing we wanted to do was to be certain we were not quoted as being in favor of something that we have been opposed to during the years."

Dr. George W. Robertson III, of Dade: "It is just a matter of semantics, but because of the odor of the word, let's change this to 'divide' instead of 'split.'"

Dr. Richard M. Fleming, of Dade: "I am a member of the committee that heard the arguments, pro and con. It was our feeling, after listening to the presentations that were made, that it would be virtually impossible to divide the fees and have the physician bill for his services and have the hospital bill for its technical part. We felt that by deleting the part that was deleted, we could reaffirm the principle and allow this to be our basic principle without binding everyone to the question of splitting every fee. I would strongly urge that we leave the deletion as recommended by the committee."

Dr. Samuel M. Day, President: "On two previous occasions, this body has recommended essentially this same thing, and has asked the Judicial Council to implement it. Now they have acted, and I think we should back them up."

Dr. Dell: "I think we are reasonable people and realize that you cannot split a $1 fee. The main thing to remember is that we expect radiologists to act like other physicians, and to bill their patients like other physicians. If you remember, this was really spurred by Dr. Zellner and Dr. Jere Annis at a joint meeting of the Florida Medical Association, Blue Shield, Blue Cross and the Florida Hospital Association. We don't see how we can stave off the entrapment of radiologists by hospitals and government in any other way. If we continue as we have in the past, radiology will be trapped as a hospital service and this presents a very real danger to medicine itself."

Dr. Mullen: "Concerning the actual statement of policy of the Judicial Council, the pathologists realize, I believe, that there will be many difficulties in trying to implement this. We want to try—we are not sure that we can do it completely—but we are not fundamentally opposed to this concept. We want to be physicians like everybody else."

The Chair called for a vote on the amendment to delete the second sentence of the Reference Committee report.

Motion was carried.

Dr. Andre S. Capi, Council on Specialty Medicine: "I propose another amendment to this report. In view of pending legislation before Congress, I move that the Florida delegation be advised of this statement of ethics of the Florida Medical Association. You are aware of the AMA's efforts to have physicians' services taken out of the King-Anderson portion of this new H. R. 6675. You are probably also aware that a group of Senators, headed by Senator Douglas of Illinois, have proposed an amendment to have physicians' services reinserted into H.R. 6675."

Motion was seconded.

Dr. Floyd K. Hurt, Secretary-Treasurer: "It is important at this time that we reaffirm and restate our opposition to having physicians' services included in the legislation now pending. The AMA very forcibly expressed this to the House Ways and Means Committee, but the American Hospital Association has gone to the Senators and asked them to reinsert these professional services into the bill."

Motion was carried.

Motion was carried to approve the Judicial Council report, as amended.

Dr. Thomas: "The Reference Committee approves the supplemental report of the Committee on Archives as presented in the delegates' packets.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Judicial Council

JERE W. ANNIS, *Chairman*

Council:

The Judicial Council met on July 12, November 6, and December 13, 1964.

Representatives of the Florida Radiological Society, Florida Society of Anesthesiologists and the Florida Society of Pathologists met with the Council and discussed in detail the implementation of the House of Delegates' policy on the corporate practice of medicine, with particular regard to a physician having a contract with the hospital. After careful consideration and discussion the Council passed unanimously the following motion:

"That any contract, written or oral, which permits purveyal of the physician's services for profit is unethical; that in the private practice of medicine a contract is only acceptable on a fee-for-service basis; we would also like to reaffirm the ethic that a physician should render the bill to the patient (himself) for his services and his services alone; and that this policy should be implemented by the local county medical so-

ciety in conjunction with the specialty society involved. If for any reason this is not possible, any problems involved should be heard and adjudicated by the Judicial Council of the Florida Medical Association."

The members of all three organizations were most cooperative and agreed that salaried contracts were not acceptable.

The Council met with the Clay County Medical Society regarding the practice of an osteopath in a local hospital and recommended to the Board of Governors that:

"Under the existing policy of the House of Delegates regarding osteopathy, the Judicial Council has determined that the Clay County physicians who are associating professionally with an osteopath are engaging in a practice which is contrary to the principles of practice of the Florida Medical Association; however, because of extenuating circumstances, no disciplinary action is recommended."

The problem of a combined medical and osteopathic staff at the Fisherman's Hospital in Marathon was the subject of a special meeting. Dr. Wynn, of Monroe County Medical Society, was informed of the Council's decision that:

"In accordance with FMA policy established by its House of Delegates in 1963, which states in part: ' . . . where osteopaths are admitted to practice in a hospital in which doctors of medicine practice, it has been held to be unethical for the doctor of medicine to have any professional relationship with the osteopath. This includes consultations, supervising the work of the osteopath through review of medical records, tissue committees, etc., or giving any other indication of professional recognition,' a single combined staff would be unethical voluntary association with an osteopath."

A grievance from a physician in Franklin County relative to professional association with osteopaths was considered, investigated, and it was determined that no evidence of unethical relationships by physicians had been elicited.

The situation of the Washington-Holmes County Medical Society regarding the difficulty of meetings with so few members was discussed and recommendations were obtained from Dr. Walter C. Payne Sr. following his investigation of the situation. It was decided that this county medical society should retain its charter.

It was determined that Walton, Okaloosa and Santa Rosa Counties be approved for individual charters in the Florida Medical Association upon approval of their bylaws by the Association's legal counsel.

A report by the Committee on Medical Licensure and the financial status of the Board of Medical Examiners was received as information.

A complaint against the University of Florida Teaching Hospital at Gainesville, which was referred by the Alachua County Medical Society Grievance Committee, was investigated and discussed with representatives of the University Hospital and the Alachua County Medical Society. The individual case was settled and the following general constructive recommendations offered to the University Hospital:

1. That the patient's physician look over his final statement soon after discharge and before billing.
2. That a more definite policy be established regarding the extent to which specialized consultations are available to physicians of the state and that this be publicized.
3. That emphasis be placed on the communications at the time of initial referral as to scope of the patient's study.
4. That one of the obligations of the University staff, to the patient and his physician, upon admission to the hospital, is the outlining for him of the proposed methods of study and procedure, and that upon discharge, an adequate and intelligible summary of the findings and suggested therapy should be presented to both patient and physician, and finally,
5. That the public relations between the physician and his patient be made a more integral part of the teaching program, stressing both professional and economic areas.

The recommendation of the Alachua County Medical Society Grievance Committee that the state grievance committee consider complaints concerning the University of Florida medical school staff originally was considered; but the Council was of the opinion that the By-Laws of the Association should be followed and that grievances involving any and all Alachua County physicians should be handled by their local society as elsewhere throughout the state; referral to the state should be resorted to only if the local society is unable to resolve the problem.

All county society grievance committees are urged to accept in full their responsiblity in dealing with and solving local grievances.

The Judicial Council reviewed and made recommendations with reference to the Interprofessional Code between Physicians and Pharmacists prepared by the Council on Allied Professions and Vocations and transmitted to us by the Board of Governors for review.

The Council received inquiries and rendered opinions as requested on the following subjects:

64-4: Telephone Directory Listings. — The Judicial Council rendered the opinion that it is not unethical for a physician to list in the yellow pages of a telephone directory of a city other than the one in which he practices if he draws patients from the area in which he lists.

64-5: Direct Telephone Lines Between Physicians' Offices and Pharmacies. — The Judicial Council rendered the opinion that the principles of medical ethics apply, and as long as there is no exploitation of the patient, the physician may have as many lines as he desires.

64-6: Incorporation With Physical Therapist by Physician. — The Judicial Council rendered the opinion that there should be no difficulty connected with a physician and a physical therapist having investments in common, but they should not be involved in the practice of medicine. The ideal situation would be if the physician were the actual owner of the establishment, with the physical therapist working for the physician on a salary-type arrangement. The main thing is to keep clear in the minds of the medical and the lay community that the physician alone is engaged in the practice of medicine and is not splitting his fees derived from this with anyone else.

64-7: Glaucoma Screening in Hospital by Optometrist. — The Judicial Council rendered the opinion that it is unethical for a medical doctor to associate, professionally, with an optometrist, both by the standards of ethics of the American Medical Association and those of the Florida Medical Association. The medical staff should do everything in its power to persuade the hospital that it is most unwise to allow this testing to be done in the hospital and with its sanction. The optometrist could not of course treat or adequately advise anyone found to have increased pressure and any such program should be under the supervision and immediate direction of a physician. It would be unwise from a public relations standpoint to discontinue the program, since it serves a good purpose in preventive medicine; however, it should not be under the direction of an optometrist.

(64-8 not approved—referred for study)

64-8: Partnership Arrangement.—The Judicial Council rendered the opinion that the partnership should be based on each physician sharing expenses of operating the office and should not be tied to a percentage of income of either.

64-9: Optometrist Practicing in Hospital Out-Patient Department with Medical Doctors. — The Ju-

dicial Council referred the inquirer to the Opinions and Reports of the Judicial Council of the American Medical Association 1960, and added its own opinion that professional association in treating patients with optometrists is unetbical; however, it is not an unethical association if an optometrist fills prescriptions written by an ophthalmologist.

Committees:

Committee on Archives. — The Archives Committee transacted its deliberations by two telephone conferences on September 19, 1964, and January 30, 1965. The Committee devised a campaign to get those physicians of the Florida Medical Association who have not completed and returned their Archives Data Forms which were mailed out in 1960, 1961, and 1962 by this Committee under the leadership of Dr. Clifford Snyder to do so. By an intensive publicity effort utilizing state and county medical publications, announcements at county society meetings, and letters mailed to the delinquent physicians and their society secretaries, we have obtained the return of some 275 forms from delinquent pbysicians.

The second project undertaken by this Committee is a long term project to obtain information that will eventually lead to the writing of a volume on the history of medicine in Florida. By personal interviews, correspondence, and study in the libraries of the state, we have already collected a moderate amount of material. This material is being studied and catalogued and studied by the chairman of the Archives Committee in such a fashion that all important details will be easily obtainable at the time the manuscript is to be prepared.

A third project undertaken by the Committee is a function to honor those members of the FMA who joined the society prior to 1927. We hope to give them a special recognition ceremony at the first meeting of the House of Delegates in April 1965.

Finally, we have worked out a brief ceremony to honor those of our members who have departed from this world since we last held our annual convention.

The Committee on Archives would like to present the following Resolution for the action of the House of Delegates:

Whereas, The Florida Medical Association from time to time is requested to supply biographical data on pbysicians who have practiced or are practicing within the state of Florida, and

Whereas, Past efforts to obtain such data from practicing physicians have met with limited success, and

Wbereas, The physician applying for membership in the Association is at that time favorably inclined to meet membership requirements of the Association, be it therefore

RESOLVED, That henceforth membership in the Florida Medical Association will not be granted an applicant until he has satisfactorily completed an application incorporating the material on the Archives Data Form, and has attached thereto a suitable recent photographic portrait of bimself.

The Chairman of the Archives Committee would like to express bis appreciation for tbe loyal support and encouragement of his committee members.

The Association has lost a number of its fine members during the past year and a list of these names is given below:

December 1963
- Martin E. Buerk—Palm Beach

January 1964
- Arthur O. Morton—Sarasota

February 1964
- A. M. C. Jobson—Hillsborough

April 1964
- Lois C. Burgh—Orange
- Velpeau R. Nobles—Escambia

May 1964
- Harvey M. Fleet—Alacbua
- David R. Murphey Jr.—Hillsborough
- Shaler Richardson—Duval
- Herbert E. White—St. Johns

June 1964
- Charles J. Bible—Dade
- Arthur J. Bieker Jr.—Pinellas
- Herbert F. Gross—Dade
- Thomas D. Head—Leon-Wakulla-Jefferson
- Murray M. Reckson—Dade
- Carl M. Smith—Lake

July 1964
- Graham E. Henson—Duval
- Ned W. Holland—Hillsborough
- Lawrence M. Hughes—Volusia
- Garret Jackson—Orange
- Frank J. Liddy—Pinellas
- Herbert N. Rafferty—Higblands

August 1964
- Edward F. Carter Sr.—Hillsborough

September 1964
- Harold H. Fox—Dade
- Edward M. Langer—Sarasota
- Arthur Levenson—Dade
- George H. McCain—Leon-Wakulla-Jefferson
- Preston H. Watters—Dade

October 1964
- Richard S. Gill—Palm Beach
- Fred A. Vincenti—Lake
- Theodore J. C. Von Storch—Dade

November 1964
- Joseph S. Spoto—Pinellas

December 1964
- Lydia A. DeVilbiss—Dade
- Maurice D. Fitzgerald—Broward
- Thomas F. Huey Jr.—Broward
- James F. McConnell—Broward
- Carolyn G. Williamson—Orange

January 1965
- Robert J. Moses Sr.—Dade
- Wiley T. Simpson—Polk
- William H. Stander—Dade
- Courtland D. Whitaker—Jackson-Calhoun

February 1965
- Harry R. Sackett—Pinellas

Supplemental Report
COMMITTEE ON ARCHIVES

Since the Handbook was compiled, the Association bas lost the following members through death:

February 1964
- O. O. Enzor—Okaloosa

January 1965
- E. Henry Ruediger—Leon-Wakulla-Jefferson

February 1965
- Bertrand F. Drake—Marion
- Roland F. Fisber—Broward
- Max W. Johannsen—Palm Beach
- Mozart A. Lischkoff—Escambia
- John Shahan—Pinellas
- Thomas K. Slaughter Jr.—Volusia

Marcb 1965
- Robert M. Baker—Duval
- Andrew F. Barnett—Hillsborough
- Charles McC. Gray—Hillsborough
- Raymond R. Sessions—Orange
- Samuel E. Stephens—Okaloosa

Grievance Committee. — The Grievance Committee received and referred to county medical societies 19 grievances, all of which have been resolved or are pending in compliance witb the Rules and Procedures of the Council.

Committee on Medical Licensure. — During 1964, the Board of Medical Examiners examined for licensure 507 applicants; 504 received licenses and three failed.

The Board has been increasingly active in the field of disciplinary activities. We are trying to carry out these duties quietly, without fanfare and with the least possible trauma and breakage to all parties concerned.

Approximately three hundred oral and written complaints have been received. All written complaints receive a reply and each complaint, oral or written, is evaluated by the director. A preliminary investigation on a valid complaint is made by the director or the investigator. Where a substantial violation appears an extensive investigation is carried out by the investigator, director and attorney. At present eight cases are under extensive investigation. Some minor complaints and questionable acts which are not actually violations of the law have been resolved by conference between the alleged violator and the director. Disciplinary action is taken only after a thorough investigation of the charges and a hearing before the Board. All hearings are recorded by a court reporter. In the past year hearings have resulted in the following actions:

4 licenses suspended (2 fraud and deceit in the practice of medicine; 1 conviction for crime of advertising; 1 narcotics violation);
10 licenses suspended with suspension not enforced and physician placed on probation and required to appear before Board semi-annually (8 narcotic violations; 1 fraud and deceit in the practice of medicine; 1 unprofessional conduct);
2 licenses revoked (1 representation that could permanently cure diseases which are manifestly incurable; 1 unprofessional conduct—improper solicitation of patients);
1 reprimand (unprofessional conduct);
8 licenses reinstated after hearing at termination of suspension;
2 requests for reinstatement of revoked licenses denied;
18 routine semi-annual interviews with physicians on probation.

Annual registration figures for 1964 were:

1964 registration paid —	
Florida addresses	5,739
Out of state	3,123
Active military service	430
Retired	158
Suspended Nonpayment of registration (out of state)	597
Total	10,047

During this period, 629 unlicensed physicians employed in Florida hospitals were listed with the Board.

Committee on Membership and Discipline. — The Committee on Membership and Discipline investigated a matter of possible overutilization of a privately owned hospital and it was reviewed by the Judicial Council, who felt that if the recommendations of the Committee on Membership and Discipline are followed the problem will be resolved.

Dr. Thomas: "Resolution No. 65-10, One Board of Medical Examiners, presented by the Broward County Medical Association, is referred to the Board of Governors for further study.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Resolution 65-10

(Not Approved—Referred for Study)

One Board of Medical Examiners

Broward County Medical Association

Whereas, The State of Florida has invested heavily in medical education, in hospitals and in public health services; and

Whereas, There is a conflict between the so-called healing arts in regard to rights, privileges and qualifications of practitioners; and

Whereas, It is desired to advance medical science in this state, and to promote the public health of its citizens; it is

RESOLVED, To establish one Board of Medical Examiners with the power to grant a license, for there is but one science of healing. Be it further

RESOLVED, The Florida Medical Association exert all effort to legislate to this end.

Dr. Thomas: "As it has been the policy of Florida doctors not to charge indigent patients for service, the Reference Committee disapproves Resolution No. 65-12, Fee for Service—Indigent Care, and recommends that it not be adopted.

"Mr. Speaker, I move that this resolution be disapproved."

Motion was seconded.

An unidentified delegate: "I wish to speak in favor of Resolution 65-12. We have a change in times, a great society, we have the intervention of a third party who seeks to pay bills.

"A child is an indigent patient, but there is a third party who pays the bill. We have a hospitalized indigent patient and the physician can charge this patient or not as he sees fit. We also have service patients and we have looming before us the very strong possibility that federal or state government will pay the bills of these indigent patients. I think we should seriously consider following the resolution, so that if and when the situation comes about that the federal or state government will pay bills, we should be on the line with a fee schedule."

Dr. Hall: "After our discussion in Jacksonville, I really thought we would be working on a philosophical principle along these lines. I think it is very important that we face this situation and decide whether we are going to have our principles changed by political action. I have come to the conclusion it is best we maintain our own principles and maintain our relations with the patient. If this patient can go and get his bills paid by the government or anyone else, then he is no longer indigent, so that solves that problem. We should maintain our principles just as they are."

Dr. William R. Daniel, of Orange: "Last year a resolution was adopted which accepted the principle that for truly indigent patients, a portion of the services be remunerated where it was agreeable with that county. What I am trying to say is that a doctor has certain overhead which may amount to 35 per cent and we adopted the principle that the doctor may be remunerated for his out-of-pocket expenses. That the doctor would continue to provide medical service, but he certainly had out-of-pocket expenses which should

be reimbursed. I think we can stick to principle by maintaining our previous resolution, and I would be unfavorably inclined toward Resolution No. 65-12."

Motion to disapprove this resolution was carried.

Dr. Thomas: "Resolution No. 65-16, Clinical Laboratory Science, presented by the Dade County Medical Association, is referred to the Committee on Medical Technologists to be considered with the item previously referred to it from the report of the Board of Governors.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Resolution 65-16

(Not Approved—Referred for Study)

Clinical Laboratory Science

Dade County Medical Association

Whereas, The Quality of practice of clinical laboratory science in our state is not uniformly good;

Whereas, Only about 25% of the clinical laboratories and 10% of the medical technologists practicing in the state come under the Florida Law on Medical Technology (Chapter 483, Florida Statutes);

Whereas, Laboratory technician training schools of poor quality flood our state with poorly trained, unlicensed technicians who find positions in the many laboratories which are not under the purview of the present Medical Technology Act;

Whereas, Because of the many exemptions under the Florida Law on Medical Technology (Chapter 483, Florida Statutes) insufficient revenue is produced to permit adequate inspection and policing of the clinical laboratories within our state;

Whereas, Some 30 organizations concerned with the practice of clinical laboratory science within our state have met during the fall of 1964 and winter of 1965 and plan to introduce into the State Legislature at its biennial meeting a revision of the Florida Law on Medical Technology (Chapter 483, Florida Statutes) which is designed to correct the many deficiencies of the present law;

Whereas, it is the duty of the Florida Medical Association to concern itself with the quality of clinical laboratory science as practiced within our state since this matter directly affects the quality of medical care within the state, be it therefore

RESOLVED, That the Florida Medical Association House of Delegates support the above mentioned revision of the Florida Law on Medical Technology (Chapter 483, Florida Statutes).

Dr. Thomas: "Resolution No. 65-18, A.A.P.S. Essay Contest, presented by Dade County Medical Association, is approved, with an amendment in the last phrase of the last paragraph to read, 'and that the FMA establish a cash prize for the winning essay in the state contest each year of at least $100.00.'

"Mr. Speaker, I move the adoption of this portion of the report as amended."

Motion was seconded.

Dr. Day: "It is a function of the Board of Governors to allocate funds and I would like to suggest that the amount be omitted and left to the discretion of the Board."

Dr. M. Eugene Flipse, of Dade: "I move to strike the words, 'of at least $100.00.'"

Motion was seconded.

Motion was carried to strike the words, "of at least $100.00."

Motion was carried to approve this portion of the report, as amended.

Resolution 65-18

A.A.P.A. Essay Contest

Dade County Medical Association

WHEREAS, the Association of American Physicians and Surgeons, Inc., is a national organization of physicians which embraces fundamental patriotic and Americanistic ideals

WHEREAS, the primary aim of the A.A.P.S. is to educate our colleagues and the general public against the dangers of "creeping socialism" and communism; the organization has demonstrated its effectiveness in this area.

WHEREAS, there is a clear necessity to expand and encourage activities of such an organization to the end of awakening latent conservatism in the public mind.

WHEREAS, the A.A.P.S. has, for several years, sponsored a nationwide essay contest for high school students on the subjects of "The Advantages of The American Free Enterprise System Over Communism" or "The Advantages of Private Medical Care."

WHEREAS, reaching young people in this age group, the new voters in 5 or 6 years, seems one of the best possible means of reversing the trend toward progressive socialization of our country.

WHEREAS, the FMA, county societies, and respective auxiliaries have strongly participated in promoting and conducting these essay contests in past years, but now have tended to withdraw from these activities due to apparent waning of interest in the project.

WHEREAS, the response to the contest, on the part of all concerned, in the past two years has shown evidence of a great potential, if enough "man power" were available to carry out the contest on the state and county levels. (A Miami girl won thirteenth prize in the national contest last year.)

WHEREAS, the woman's auxiliary would like, in most cases, to assume and continue working on this project, but cannot unless requested to by the FMA.

WHEREAS, the members of the A.A.P.S. in Florida are also members of the FMA and respective county medical societies.

BE IT THEREFORE RESOLVED that the FMA resume more active support and participation in conducting the essay contest, as it has in previous years. (especially in the 1950's); that the FMA express approval and support of the annual contest; that the FMA request the FMA Auxiliary to contribute like support; and that, if possible, the FMA establish a cash prize for the winning essay in the state contest each year.

Dr. Thomas: "Mr. Speaker, I move the adoption of this entire report as amended."

No discussion; no objections; motion carried.

The Vice Speaker assumed the Chair.

REPORT OF REFERENCE COMMITTEE NO. IV

Legislation and Miscellaneous

Dr. Charles R. Sias, Chairman: "Mr. Speaker, Mr. President, and Members of the House of Delegates: Your Reference Committee gave careful consideration to the items referred to it and makes the following report:

"The Reference Committee considered the report of the Council on Legislation and Public Agencies and recommends it be approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Council on Legislation and Public Agencies

JOSEPH C. VON THRON, *Chairman*

Council:

The Council met jointly with the Committee on State Legislation and Subcommittee on Liaison with State Agencies in Tallahassee at which time recommendations regarding specific items to be included in the state legislative program were developed and subsequently approved by the Board of Governors.

Committees:

National Legislation. — Of primary interest was continued opposition to King-Anderson type legislation and further implementation of Kerr-Mills philosophy. The FMA was represented at a special meeting called by the AMA concerning pending Health Care Legislation in the 88th Congress. Medicare type legislation failed even after successful passage in the Senate.

The Association was also represented at two special conferences in Chicago concerning health care legislation.

Following these meetings, an extensive educational program was directed toward both physicians and laity in select areas of the state. This concerted effort was promulgated through joint efforts of the AMA, FMA and component county medical societies.

The annual Washington visitation with the entire Florida Congressional Delegation in February further improved the already excellent rapport existing between our solons and physicians. Despite the national picture, the majority of Florida's Congressional Delegation is to be commended for its sincere interest in providing the best possible health care program for those in need.

State Legislation. — The Committee on State Legislation met in Tallahassee on December 9, 1964. Items for our 1965 FMA Legislative Program were discussed and acted upon. On the same day the COMAH Committee met and formulated plans for the 1965 legislative session. Your chairman of the Committee on State Legislation is also chairman of the COMAH committee. On January 9 and 10, 1965 your chairman, Mr. Al James and our COMAH legal adviser, Mr. L. Grant Peeples, attended the Conference on Kerr-Mills sponsored by the AMA in Chicago. At this conference, Dr. Donovan Ward, AMA President, presented the AMA program for medical care of the aged. Our President-Elect, Dr. H. Phillip Hampton, was also in attendance and he was very instrumental in the formulation of the AMA program as announced by Dr. Ward.

FMA Legislative Program: Proposed bills to be sponsored by the FMA during the 1965 Session of the Florida Legislature are:

A. Medical Assistance for the Aged. Proposed amendments to Section 409.45, F.S., are intended to change existing statutory authority to provide for the following:

1. Consideration of prior expenditures for health care in determining financial eligibility of applicant.
2. Determination of eligibility for services by statement of income, assets, and resources made under oath.
3. Provision for recovery of expenditures from estate of recipient after death of surviving spouse.
4. Authorizing the term "hospital care" to include both inpatient and outpatient hospital care.
5. Authorize use of an insurance agency as insuror or fiscal agent for administration of the program.

B. Investigative Scientific Medical Studies. Proposed bill is intended to provide that the findings and conclusions of investigative studies are privileged communication; and that the identity of any person whose condition or treatment has been studied shall be confidential.

C. Good Samaritan Legislation. Proposed bill is intended to provide legal immunity from professional liability for physicians who in good faith render emergency care at the scene of an accident.

D. Labeling of Poisonous Substances. A bill to be prepared for introduction unless there is some specific reason for not presenting it in the 1965 session.

Other Legislation of interest to FMA:

A. Indigent Health Care. FMA supports adequate appropriation of state funds sufficient to provide a comprehensive health care program for indigent citizens of all ages. The Florida Legislature is to be requested to make an annual appropriation of 50¢ per capita for the Hospital Service for the Indigent Program as authorized by Chapter 401. Florida Statutes.

B. Mental Health. FMA supports:

1. Legislation providing that a Division of Mental Health be organized in a vertical direction, under the direction of a board with adequate representation of doctors of medicine providing both hospital and community mental health outpatient services and that this Division of Mental Health be under the direction of a qualified psychiatrist.
2. Restoration of Section 394.21, Florida Statutes, or similar legislation providing for nonjudicial involuntary hospitalization for the mentally ill. Restoration of this provision in the state law is intended to provide for emergency involuntary admission of suspected psychotic persons.

C. Statutory Hospital Staff Privileges. FMA opposes legislation providing statutory privileges for physicians in any branches of the healing arts to the medical staffs of tax-supported hospitals or to any hospitals.

D. PKU Testing. FMA opposes any type mandatory law requiring PKU testing. FMA recommends that continued efforts be made to encourage public education regarding the value and use of voluntary PKU testing.

E. Area-Wide Health Facilities Planning. FMA opposes compulsory area-wide planning legislation for hospitals and other health facilities. This should be done on a voluntary basis.

Subcommittee on Liaison with State Agencies:

Alcoholic Rehabilitation. — The Florida Alcoholic Rehabilitation Program functions through a 64-bed inpatient hospital at Avon Park and outpatient clinics at Jacksonville, Pensacola, Tampa, Miami, and Orlando.

In addition to (1) *services* to about 1 to 2% of our 150,000 alcoholics, the program is directly involved in (2) *education* of the community about alcoholism and (3) *clinical research* into causes, prevention, and treatment of alcoholism.

Members of Reference Committee No. IV included Drs. Charles R. Sias, Fred A. Butler, William H. Keeler III, Russell B. Carson and Francis N. Cooke.

Our program of education not only supplies professionals with suggestions and tested knowledge but also disseminates information to the general public and community agencies while promoting the utilization of treatment facilities.

We organize and staff an annual School of Alcohol Studies at the University of South Florida.

Our goal is that of effective cooperation with the Florida medical community. Our task is the challenging one of dealing voluntarily with patients often poorly motivated. Our best estimates indicate, though, that about one third of all alcoholics can be successfully treated.

In an effort to increase efficiency and volume in our outpatient clinics, we have reviewed their operations in detail with the help of an independent management consultant firm. This study, completed in November 1964, is leading to a reorganization, streamlining, and improved review and testing of our various clinics.

Our studies indicate that some increase in personnel is advisable to achieve an effective but minimal task force in each area.

Implementing our plans could increase our present involvement with the alcoholic population to a target figure of 4 to 5% during the next few years.

The advisory council has agreed to support an effort to obtain the necessary funds to meet the budgeted requests. The details are being studied. Including an appropriate fraction of beer and wine taxes without a change in revenue from spirits is one possibility.

Our management study has not concurred with the incorporation of our program into a proposed Division of Mental Health. Attracting and treating the voluntary alcoholic patient, flexibility of operation, and community acceptance of our being financed justifiably by less than 1% of the liquor tax suggest we continue separately.

We are fortunate to have an experienced specialist in alcoholism problems, Ronald J. Catanzaro, M.D., as our clinical director.

Finally, our program over its span of 10 years has become well established with a reputation of excellence not only in the state but also as an acknowledged outstanding performer among the many continental members of the North American Association of Alcoholism Programs. Florida is well represented.

Division of Child Training. — Visits to each of the Four Sunland Training Centers have been made by the chairman within the past two months and a conference with Mr. William Maypoles, Director of Sunland Training Centers of Florida, has provided an opportunity to discuss with the Superintendents and the Medical Directors problems and facts that are pertinent to Florida Medical Association relationship with these Centers.

Recommendations of Subcommittee:

a. Enhancement of relationship with resident training programs of the Medical Schools in Florida and thereby also improving the medical care available to the children in the centers.

b. Establishment of better medical student training with possible use of junior-senior students at interims when they are not in school as "externes."

c. Improvement of Research Program by encouraging more money for good research by *good professional personnel.*

d. Better training facilities for the trainable in order to make them self-supporting or partially so, as the case may be.

e. Enhancement of the Community Programs.

Insurance Department. — Late in 1964 liaison was established for the first time with the office of the Insurance Commissioner at the direction of the president of the Association. The late Mr. Larson attended our first Area Conference in St. Petersburg in August and a good start at liaison activities was made at that time. Mr. Frank Alexander has also been most helpful.

In Orlando in January 1965 at the meeting of the Committee on Health Insurance a representative of Mr. Larson's office attended and mutual problems were discussed. It is my feeling that this association is potentially a fruitful one. The Office of the State Insurance Commissioner will communicate with the Chairman and the Committee on Health Insurance as needed in the future.

Recommendations of Committee:

It is recommended that this liaison position with the Insurance Department, State of Florida, be maintained on a permanent basis.

Vocational Rehabilitation. — The Medical Advisory Committee to the Division of Vocational Rehabilitation met in Jacksonville on March 14, 1964, and on October 24, 1964. The Credentials Committee reported on new applicants for the Panel of Medical Physicians rendering Specialty or Special Services and the qualified applicants were admitted to the Panel. The Executive Committee of the Florida Medical Association has indicated that the present fee schedule of the Division of Vocational Rehabilitation is unsatisfactory because the fee schedule is in-

equitable to one section of medical practice as compared with another and because the fee schedule was not negotiated with the Florida Medical Association's Committee on Fee Schedules. Dr. A. Fred Turner of Orlando was elected as Chairman of the Advisory Committee to succeed Dr. George McSwain of Daytona Beach, whose term of office expired on December 31, 1964.

Dr. George McSwain, Daytona Beach, Dr. Fred Butler, Tallahassee, and Mr. Dodd Pace, the Assistant Director of Vocational Rehabilitation, met in Jacksonville on November 15, 1964, with the Fee Schedules Committee of the Florida Medical Association.

Dr. Sias: "The Reference Committee considered the report of the Council on Medical Economics and recommends that it be approved as printed in the Handbook, with the exception of some changes in the report of the Committee on Fee Schedules.

"Fee Schedules — Recommendation No. 1, page 48 of the Handbook: Delete the last four words, 'at a later date,' and insert, 'within the next year and reported at the next annual meeting.'

"Recommendation No. 3, page 49 of the Handbook. Delete the last three lines, 'that any major changes in this program as suggested should begin with new discussion for the entire program,' and insert, 'that continued discussion of the entire program be maintained.'

"Recommendation No. 5, page 49 of the Handbook. Delete from the last three lines, 'use the following conversion factors: 4.5 for surgery, including anesthesia; 5.0 for medicine, laboratory and radiology,' and insert, 'the prevailing fee for the services rendered in the area of service.' It is the opinion of your committee that conversion factors should not be set by this House of Delegates. For your information, this matter is on the agenda of the next meeting of your Fee Schedule Committee with representatives from Vocational Rehabilitation, including the Hon. Claude R. Andrews, invited to be present.

"Mr. Speaker, I move the adoption of this portion of the report, as amended."

Motion was seconded, and carried.

Council on Medical Economics

JACK A. MACRIS, *Chairman*

Council:

During the past year, all Committees coming under the Council met one or more times. Recommendations as developed by these Committees were acted upon by the Council and subsequently approved by the Board of Governors. The significant recommendations are included as part of the summary reports for each Committee.

Committees:

Committee on Advisory to Blue Shield. — The Committee met during the month of January 1965, and the main purpose of the meeting was to consider a proposed alternate "J" Blue Shield contract. In considering this matter, the Committee members were reminded that the FMA House of Delegates has directed that all fee schedules be based on the Relative Value Studies. In keeping with this directive, the Board of Directors of Blue Shield recommended the development of a new "J" B.S. contract based on the 1962 FMA Relative Value Studies at a rate comparable to the present "J" contract. It is intended that this matter be thoroughly studied by concerned FMA Committees with particular attention given by "Committee of Seventeen," Fee Schedules Committee, and the New Contract Committee of Blue Shield.

In the detailed discussion of the proposed alternate "J" contract, it was made known to the Committee that the present "J" contract represented approximately 42% of Blue Shield's subscribers and that about 15% came within "service" classification. Of particular interest were the indemnity benefits proposed under Radiology, Pathology and Anesthesia, and the $3.00 benefit for gross examination under Pathology. Following review of all pertinent utilization data, and proposed benefits, several Committee members questioned the validity of making such a contract available. It was specifically noted that such a contract would only saddle the doctors with another unsatisfactory fee schedule and further it was suggested that Blue Shield should be requested to quit selling the present "J" contract.

It is suggested that appropriate authority be given to use judgment in asking for EKG reports in claims for the care of patients with acute myocardial infarction and not require them on every case.

There was discussion of replies from the individual Committee members regarding an opinion poll conducted by the chairman. As a result of the poll, the following suggestions were offered:

(a) Notification of next of kin by Blue Shield-Blue Cross when a direct contract is to be cancelled for nonpayment;

(b) That medicine needs a negotiator to work with all fee schedules; and (c) that Blue Shield should explain service benefits better as a selling point.

Committee on Fee Schedules. — The Committee met for two days in Jacksonville during the month of November 1964. At this meeting, the Committee's attention was directed toward consideration of specific items relating to updating the FMA Relative Value Studies. In addition, thorough review was made of the current fee schedules used for the following programs:

(a) Workmen's Compensation
(b) Veteran's Administration
(c) Vocational Rehabilitation
(d) Medicare
(e) Blue Shield

The following significant recommendations were adopted by the Council on Medical Economics and subsequently approved by the FMA Board of Governors:

Recommendations:

1. **FMA Relative Value Studies. — That a listing be compiled of new diagnostic and special procedures for study by the Committee and Council on Specialty Medicine within the next year and reported at the next annual meeting.**
2. **That a code number and nomenclature to read "Special situations, not covered below (Refer to page 8, paragraphs 5, 6, and 15), By Report," be added under the heading of each major system of each section.**
3. **That the Chairman of the Florida Industrial Commission be advised that the FMA Fee Schedule Committee respectfully requests continuation of the Workmen's Compensation Medical Program as agreed upon, including a nonpublished fee schedule and that continued discussion of the entire program be maintained.**
4. **That the interpretations of the Relative Value Studies by Dr. Thomas J. Bixler, as Medical Consultant to the Florida Industrial Commission, are consistent with the views of the Fee Schedules Committee.**

5. **That the current fee schedule of Vocation Rehabilitation not now recognized by the Florida Medical Association be changed to use the prevailing fee for the services rendered in the area of service.**
6. **That Roy E. Campbell, M.D., Liaison Representative to the Veterans Administration, be advised that the Committee wishes to acknowledge with appreciation the interest of the Veterans Administration in proposing to update the present fee schedule via use of relative value studies and that the VA be advised that the proposal offered is not acceptable in that it is contrary to the principle of relative values and not in keeping with the present policy of the Committee on Fee Schedules and that of the FMA as established by the House of Delegates; and further that should the VA desire to use the FMA Relative Value Studies with a conversion factor of 5.0 for the interim period effective July 1, 1965 through June 30, 1966, then such proposal would be acceptable; otherwise, it cannot be approved.**
7. **That Roy E. Campbell, M.D., call to the attention of the Board of Governors the Veterans Administration's recent policy of holding treating physicians liable for the cost of prescriptions rendered which the VA later determines not to be applicable to authorized care.**
8. **That any instances of physical therapists practicing not under the direction of a person licensed to practice medicine be called to the attention of the Board of Medical Examiners.**

Committee on Health Insurance. — During the past year the Committee on Health Insurance of the FMA has been quite active. The area conferences on health insurance and utilization were held, the first one in St. Petersburg in August 1964; the second in Orlando in January 1965. The conferences were well attended and appeared to be worthwhile.

At this time no new area conferences have been planned.

There was a regular meeting of the Committee on Health Insurance in Orlando in January 1965 at which time it was recommended that the Orange County Medical Society in cooperation with the local hospitals institute a utilization program for the county. They will be assisted by the members of the Florida Commission on the Cost of Medical Care and the Health Insurance Council of America through the efforts of Mr. Louis Orsini, Executive Director.

Two important recommendations were made to the Board of Governors during the year by the Committee on Health Insurance through the Council on Medical Insurance through the Council on Medical Economics:

Recommendations:

(1) **That the Council on Medical Economics recommend that the Board of Governors of FMA request the Deans of the University of Miami and the University of Florida Medical Schools to institute a course in medical economics, preferably in the fourth year medical school curriculum; and that the Deans of the two medical schools be advised that the FMA Council on Medical Economics desires to be of assistance in the presentation of such an academic program.**

(2) **It was recommended that the Board of Governors consider a proposed change in the By-Laws of the FMA providing that review of incidences involving overutilization of services and overtreatment by the physicians be a function of the Committee on Health Insurance.**

Attention was called to the Council on Medical Economics of the new standardized HIC claim form "Attending Physician's Statement — Health Insurance Claim — Group or Individual COMB-1964." This form is available for general use in Florida and its presence was called to the attention of the Office of the State Insurance Commissioner for his edification and approval. It was the opinion of the Committee on Health Insurance that the Health Insurance Council of Florida and Blue Shield be advised that the physician involved in a questionable case be contacted prior to referring this case to the Insurance Review Committee of the local medical society. It was also recommended that all claims submitted for review be reviewed initially by insurance company medical authority if such is available. In regard to the Committee's action on Dr. Von Thron's letter with reference to proposed legislation to require or enable insurance companies to make vested interest parties payee of benefits, "the Committee felt that legally vested interest parties consist of those parties to the insurance contract (company, insured who pays the premium, and/or the insured or employer who jointly pay premiums), and that much progress had been made through working with HIC in having companies honor assignment of benefits payable to physicians. No action by the Committee was taken regarding the need for legislation concerning this matter."

The Committee again pointed out the need for stepped up educational activities at the county level and the necessity for close contact with insurance representatives in order that mutual problems relating to medical economics be freely discussed for the edification of both groups.

Medicare Mediation Committee. — This report is made on a calendar year basis to coincide with the accounting procedures of the fiscal administrator, Blue Shield.

During the year five meetings were held, two in Jacksonville, one in Orlando, one in Hollywood, and one in Gainesville. Attendance at all meetings was excellent.

Again we wish to express appreciation to the county medicare committees for their valuable assistance in conducting local reviews and making equitable recommendations.

Blue Shield paid 14,923 medicare claims to physicians for a total of $1,328,794.00, an increase of $180,455 over 1963. Of these claims, 1,058 (7 per cent) were referred to the county and state committees for consideration. The number of physicians participating was 2,174, or 187 more than in 1963.

As these statistics show, Medicare for military dependents continues to grow, both in volume and physician participation. The work load for the Committee has become almost prohibitive and for this reason the Office for Dependents' Medical Care has agreed to the employment of a Medical Consultant, who will review the claims about which there is some question and will make a decision on those presenting a simple problem of medical judgment. The more complicated claims and those requiring local investigation will continue to be sent to the county and state committees.

Committee on Members Insurance. — The Committee's primary responsibility is to exercise overall supervision in the development and administration of insurance programs sponsored by and made available to FMA members. Not only is it important that FMA take an active part in offering to physicians the best possible insurance plans available but it is equally important that such plans receive administrative supervision by both the Committee and the insurance administrators (Marsh & McLennan, Inc.).

The Committee met in Orlando during the month of October 1964, at which time Mr. Joe A. Mozzeta, FMA Insurance Administrator employed by Marsh & McLennan, Inc., presented the annual report which summarizes the activities for all Association-sponsored insurance programs.

The Committee directed attention to the following proposed changes intended to improve both benefit coverage and participation in each plan sponsored by the Association:

Catastrophe Hospital-Nurse: Offering of additional optional deductibles of $25.00; $300.00; and $400.00, as supplements to the present $500.00 deductible.

Office Overhead: A plan of "short term coverage" for those considered uninsurable under other plans and that such coverage be offered as separate coverage. Such suggested short term coverage would be for a period of two, three, or six months, if feasible.

Disability Income (both short and long terms): No proposed change.

Accidental Death and Dismemberment: No proposed change.

Professional Liability: Mr. Leyton Hunter of the London Agency met with the Committee and presented a thorough review of the past activities leading to the development of the several benefit programs. He also summarized the interest and efforts that had been directed toward development of the present program of professional liability insurance.

The program of professional liability insurance as sponsored by the Association is recognized as being of extreme importance to practicing physicians and because of this the Committee wishes to emphasize that a more concerted effort should be directed toward increased participation which is vital to the continued stability of the program. In an effort to promote greater participation, an administrative change has been made whereby physicians can obtain coverage through their local insurance agents and that the agents can now share in the commissions for writing such coverage. In addition to this improvement, the Committee is advised that because of the uncertain insurable features of this type of insurance, several major carriers which in the past have written an appreciable amount of this coverage are now curtailing their interest and/or in known instances are no longer writing this particular line.

The Committee strongly urges that the Association continue its efforts to have members recognize the necessity that practicing pbysicians must maintain adequate professional liability insurance through a program in which all parties concerned, namely, the FMA insured physicians and insurance companies, share equal responsibilities.

A summary of participation in the professional liability insurance program as of February 1965, is as follows:

Participants	No. of Policies	Total Doctors
Individual doctors	536	536
Two-man partnerships	57	114
Three-man partnerships	18	54
Four-man partnerships	7	28
Five-man partnerships	0	0
Six-man partnerships	1	6
	619	738

In summary discussion it was pointed out that the present basic program of professional liability should remain unchanged until sufficient participation is achieved.

In further recognizing the importance of this type coverage, the following suggested recommendations intended to achieve greater participation were developed. (Recommendations are submitted without Council approval).

(1) That Marsh & McLennan, working with the FMA staff, would prepare a similar promotional slide presentation as was used by Blue Shield and that such material should be used in presenting the program to county medical societies, hospital staffs, etc.

(2) That appropriate correspondence be directed to county medical societies offering a presentation of a program covering all FMA-sponsored plans with special emphasis directed toward the professional liability insurance program.

(3) That efforts be continued to promote the programs through exhibits at the FMA annual meeting; presentation at annual Conference of Presidents and Secretaries; and where possible advertising in the various county medical society publications monthly, quarterly, etc.

The availability of both excess and premise coverage is to be considered supplemental only and not programs officially sponsored by the FMA.

In recognizing the present basic limits of $100,000/$300,000 of professional liability coverage, it is the consensus of the Committee that it be recommended that the insurance administrator make it known to interested FMA members that excess coverage is available.

It is recommended that it be made known by the insurance administrator that premise liability coverage is available.

Attention is called to the FMA booklet entitled "Guide for Malpractice Protection." This booklet is furnished to all members for their information and is used by Marsh and McLennan, Inc., for promotional purposes and by the insurance company claims personnel in handling physician claims.

The Committee also concerned itself with consideration of several individual situations regarding claim involvements of FMA members. In the absence of information to the contrary, the Committee is pleased to report that each individual situation has been mutually resolved.

Committee on Occupational Health. — The Committee on Occupational Health is concerned with all matters affecting the environmental and occupational health in industry. In prior years, the Committee concerned itself primarily with situations involving the subject matter of fees paid under the FIC Workmen's Compensation Program. The matter of fees has been taken over by the Fee Schedules Committee and because of this, responsibilities of this Committee have changed and now it intends to exercise its obligations in new directions.

The Committee held its organizational meeting February 14, 1965, at which time attention was directed toward consideration and adoption of the principles and guides as recommended by the AMA for the establishment and functions of a Committee on Occupational Health. Other areas of concern relating to: (1) determination of the feasibility of establishing rehabilitation facilities in Florida; (2) extent of the two state medical schools curriculum relative to occupational and preventive medicine; (3) establishing closer liaison with state and national agencies concerned with medical aspects of occupational involvements.

Specific recommendations as adopted by the Council on Medical Economics and approved by the Board of Governors of the FMA are as follows:

Recommendations:

1. **The members of this Committee should include physicians oriented to the problems of occupational health.**
2. **The Committee should establish general overall objectives.**
3. **The Committee should increase its activities so that better liaison can be established between Florida physicians, the Industrial Commission, and industry in cooperation and consultation with the Fee Schedules Committee.**
4. **It was mentioned that in future Committee appointments consideration be given to utilizing the Medical Consultant to the Florida Industrial Commission in an advisory capacity.**

Dr. Sias: "The Reference Committee considered the report of the Council on Special Activities and recommends that it be approved as printed in the Handbook.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Council on Special Activities

ROBERT B. McIVER, *Chairman*

Council:

This Council has not met as such during the year, but the individual Committees have carried out their respective activities.

Committees:

Board of Past Presidents. — Your Board of Past Presi-

dents meets each year at the time of the Annual Meeting. It was the request of the Board of Past Presidents that the Florida Medical Foundation establish a Past President's Memorial Fund for indigent and destitute physicians. The Foundation was receptive to this recommendation and this fund has been established and is in operation.

The Board of Past Presidents is most gratified that the House of Delegates saw fit to amend the By-Laws and bestow full membership in the House of Delegates to Past Presidents.

A.M.A. House of Delegates. — Florida Delegates to the American Medical Association attended the annual convention in San Francisco, June 1964, as well as the meeting in Bal Harbour, Florida, for the clinical session, November-December 1964. The Florida Citrus Commission cooperated with the Florida Medical Association in furnishing orange juice and baskets of fruit to all delegates in attendance during the clinical session. Delegates expressed great appreciation for this kindness.

The majority of your delegates to the A.M.A. are serving on councils and committees of our parent association. Several have served during the last two sessions on reference committees and others have, together with officers and members of the Florida Medical Association, added greatly in their appearances before reference committees.

Your delegates attended a special two-day session of the AMA House of Delegates in Chicago on February 6-7, 1965, at which time unanimous approval was given the AMA "Eldercare" Program and to the Herlong-Curtis Eldercare Bill H.R. 3727, which embodies the basic principles of the AMA program. All members of the Association were advised of the details through the AMA News, and a special letter to each physician from the AMA President.

The Delegates are grateful for the cooperation of Florida physicians and appreciative of the extreme and important assistance rendered by Mr. Harold Parham and his staff before and during all annual and clinical sessions.

Dr. Sias: "Your Reference Committee elected to consider concurrently Resolution 65-2 on Non-Participation from the St. Johns County Medical Society and Resolution 65-17 on Medicare from Delegate Ralph Herz, M.D., as pertaining to the same general subject. Your Reference Committee recommends that Resolution 65-17 be substituted for Resolution 65-2 with the following changes:

"In paragraph 4, change 'Social Security financial' to read 'Social Security financed.' In paragraph 5, delete from the last three lines, 'hold open hearings on this bill and that our representatives be allowed to appear before this committee,' and insert, 'in its open hearings permit our representatives to appear and present the views of this Association.'

"In paragraph 6, delete from the last two lines, 'and that our patients be urged to contact them in this regard.'

"In paragraph 7, delete the last five words, 'the Magna Charta of Medicine,' and insert, 'The House of Delegates believes the Medical Profession will see to it that every person receives the best medical care regardless of his ability to pay; and it further believes that the profession will render that care according to the system it believes is in the public interest; and that it will not be a willing party to implementing any system which we believe to be detrimental to the public welfare." (Amendment to Reference Committee Report presented by Louis H. Bauer, M.D., American Medical Association Annual Meeting, June, 1961.)

"As most of you are aware, Senator Byrd has granted open hearings on this bill before the Senate Finance Committee, beginning this coming week. Although the bill is quite certain to pass the Senate without difficulty, many changes in it are still possible. Your Committee feels that it would be unwise to take any precipitous action before we know the actual provisions of the final bill. Furthermore, there will probably be a full year before the bill goes into effect in July of 1966. During this year each individual physician must search his own conscience to determine in his own practice what is morally and ethically right for his patients and for his country. Then one year from now your Committee feels that we can make a more considered judgment as to what our position must be. Approximately 80 per cent of the state medical associations will be meeting again before July 1966. In the meantime your Committee feels that the Bauer resolution is a statement of principle that everyone of us can conscientiously support, each in his own individual way.

"Mr. Speaker, I move the adoption of this portion of the report, as amended."

There were objections from the floor to the wording of this resolution and after considerable discussion, the Reference Committee was asked to retire and rewrite it. Dr. Sias was asked to continue with the remainder of his report.

Dr. Sias: "The Reference Committee considered Resolution 65-4 on Adequate Treatment of Medically Indigent and feels that this matter is under continual review by our legislative committees and by the Advisory Committee to the State Welfare Board.

"Mr. Speaker, the Committee recommends that Resolution 65-4 not be adopted."

Motion was seconded.

Dr. George W. Morse, of Escambia: "Our society is convinced that part of the reason for the recent Medicare bill passing is that we have turned our eyes against the fact that the indigent of our state cannot get adequate medical care. If a person has an acute coronary and comes under one of the welfare bills, he can be admitted and treated. If the patient has a severe case of

diabetes, you cannot admit him and treat him until he is in coma. A hernia cannot be repaired unless it is strangulated. This is not good medicine. I think it behooves this body to go on record as admitting that all of the indigent of this state are not adequately cared for. At the present time we are blamed if people are not cared for, but the real cause is lack of sufficient appropriation to take care of amenable illnesses. I think the House should vote against the recommendation of the Reference Committee."

Dr. Daughtry, of Dade: "Our delegation felt they were in favor of this with a slight amendment, that the words 'both acute and chronic' be deleted. I move that it be so amended."

Dr. Kermit H. Gates, of Dade: "I would like to speak in support of the elimination of the words 'acute and chronic.' This at the present time does not include physicians' services, but this is a matter of law. The Florida Hospital Association has gone on record that the words 'acute and chronic' be eliminated."

Dr. H. Phillip Hampton, President-Elect: "The House has taken action on this previously. We now have bills before the Legislature to accomplish this. As a matter of fact, the law has been amended to read 'short term illnesses amenable to therapy.' The whole subject is a matter of interpretation by paid members of the Welfare Board who are not paying attention to the law. I think if we devoted our time to changing the personnel, it would be much more effective."

The Chair ruled that the motion to amend was not in order until a motion was made to approve the report, because the motion already on the floor was to disapprove.

Dr. Daughtry made a substitute motion to approve Resolution 65-4 with the deletion of the words 'both acute and chronic.'

Dr. Zellner rose to a point of order, stated that a substitute motion may not be in direct opposition to the main motion and challenged the Speaker's ruling, asking for a vote of the House to determine whether or not this ruling should be upheld.

The House voted to uphold the ruling of the Speaker.

Substitute motion carried.

Resolution 65-4

Adequate Treatment of Medically Indigent — Escambia County Medical Society

RESOLVED, That the State Welfare Board request sufficient funds from the Legislature to provide adequate treatment for the certified medically indigent of the State of Florida, for illnesses amenable to therapy.

Dr. Sias: "The Reference Committee considered Resolution 65-5 on Insurance Review Committees and after prolonged discussion of the pros and cons of the establishment of insurance review committees and hearing of the many different ways in which the problem is handled, it would be our opinion that the resolution as presented be disapproved. We would suggest that the individual counties may activate insurance review committees in a way that would best meet their individual needs. We would further recommend that the Board of Governors study the policies and procedures relative to insurance review committees.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Dr. Sias: "The Reference Committee considered Resolution 65-6 on the Australian National Scheme and recommends that it be referred to the FMA Board of Governors and subsequently to the appropriate committee for study and consideration.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Resolution 65-6

(Not Approved—Referred for Study)

Australian National Scheme
Marion County Medical Society

Whereas, There are now before the Congress of the United States several bills relating to public financing of hospital and medical care, and

Whereas, It has come to the attention of the Marion County Medical Society that the Commonwealth of Australia has had what appears to be a sound National Health Scheme for approximately ten years, the said society at its regular meeting in Ocala, Florida, February 16, 1965, has passed the following resolution:

RESOLVED, That the Florida Medical Association make public recognition of the Australian National Scheme and call to the attention of the American Medical Association and the Congress of the United States the fact that for about ten years the Australians have utilized a system of public financing of hospital and medical care that appears to be practical and pleasing to the public, the medical profession and politicians. The system may be outlined as follows:

1. The government pays hospitalization for indigents directly to hospitals.
2. The government reimburses the pharmacists for the cost of prescriptions above a basic payment of sixty cents. The government pays approximately seventy-five per cent of the total annual nationwide drug bill.
3. The government pays physicians two-thirds of their regular charges for services to indigents by a simple mechanism.

4. The cost of Comprehensive Hospital and Medical Insurance for non-indigents is partly covered by the government so that the cost to the individual is well within his means. This system is voluntary, widely adopted and appears to be a very practical solution to the problem of financing comprehensive medical and hospital care. Be it further

RESOLVED, That the details of the Australian scheme will be carefully studied by the above organization (See N.E.J.M. 272-293, February 11, 1965, enclosed) and such parts of it as appear to be in the best interests of the people of the limited states be incorporated with the pending legislation; be it further

RESOLVED, That the extensive experience of the Australians, a people much like ourselves, lends considerable strength to the basic principles of their scheme, and this should be used by the above organization in persuading the public and the Congress to adopt similar policies.

Dr. Sias: "The Reference Committee considered Resolution 65-9, Insurance, and recommends that it be referred to the FMA Board of Governors and subsequently to the appropriate committee for study and consideration.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Resolution 65-9

(Not Approved—Referred for Study)

Insurance

Monroe County Medical Society

Whereas, The Florida Medical Association and the American Medical Association have a group insurance plan with the Continental Casualty Company and,

Whereas, The Continental Casualty Company cancelled one of our members Health and Accident policies on his 70th birthday.

Whereas, One of the policies of the Continental Casualty Company guarantees any certain compensation after the first year of total disability and,

Whereas, The Monroe County Medical Society is unanimously opposed to federal legislation of compulsory insurance through Social Security, be it therefore

RESOLVED, That the House of Delegates of the Florida Medical Association reconsider the contracts issued by the Continental Casualty Company, and be it further

RESOLVED, That the Delegates of the Florida Medical Association to the American Medical Association be instructed that this resolution be adopted by the Delegates of the American Medical Association.

(A sample policy with another insurance company will be presented at the hearing of this resolution. This policy will differ from those in existence by:

1. Have a non-cancellable clause.
2. To be applicable in all diseases without exception.
3. In a case of total disability, payments should begin as soon as the diagnosis has been established.)

Dr. Sias: "The Reference Committee considered Resolution 65-11, Support of Blue Shield of Florida, and recommends it be approved as written.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Resolution 65-11

Support of Blue Shield of Florida

Orange County Medical Society

Whereas, The Orange County Medical Society believes that Blue Shield of Florida has the ability to provide the best type of prepaid medical care protection for the citizens of Florida,

Whereas, It is essential that doctors retain control of the practice of medicine, and not lose it to the government, or any other non-medical party, therefore, be it

RESOLVED, That the Orange County Medical Society recommends to the Florida Medical Association that Blue Shield of Florida be maintained and strengthened in every way possible; and that individual doctors and county medical societies give this Plan their wholehearted cooperation and support. It is further

RESOLVED, That the resolution be submitted to the House of Delegates of the Florida Medical Association meeting for approval in session at Miami Beach, April, 1965.

Dr. Sias: "The Reference Committee considered Resolution 65-13, Medical Coroner System, and recommends that it be referred to the Board of Governors for immediate study and formulation of necessary legislative proposals.

"Mr. Speaker, I move the adoption of this portion of the report."

No discussion; no objections; motion carried.

Resolution 65-13

(Not Approved—Referred for Study)

Medical Coroner System

Clay County Medical Society

Whereas, The undersigned members of the Clay County Medical Society have reason to believe that the present archaic system of handling post-mortem examinations, coroners inquests, and reports on suspicious and accidental deaths in rural Florida is most unsatisfactory from a medical and legal point of view, and

Whereas, We the undersigned believe that this system can and should be changed in order that all legal requirements might be met and the ends of justice might be better served, therefore be it

RESOLVED, That

1) We do wholeheartedly endorse the prospect of a change in the present coroners system in rural Florida, and

2) We do earnestly and urgently recommend to our Legislative Delegation that they immediately embark on an effort to find a solution to the problem with the necessary enabling legislation to make the change which would result in the establishment of a central laboratory or laboratories, for the investigation into violent, and unexplained, or suspicious deaths in rural Florida, and for profession supervision of the coroners office in such counties.

Dr. Sias: "The Reference Committee considered Resolution 65-14, Fee Schedules, and recommends the following changes. In paragraph 1, delete the last word 'and,' and insert 'be it therefore,'. It is recommended that paragraphs 2, 3 and 4 be deleted. It is recommended that paragraph 5 be changed to read, 'RESOLVED, that the Council on Specialty Medicine and the Fee

Schedule Committee establish liaison with these various organizations for the purpose of arriving at fee schedules commensurate with the value of the services performed, and be it.'

"Mr. Speaker, I move the adoption of this portion of the report, as amended."

Dr. William A. Shaver, of Dade: "Our delegation discussed this and we wish to move an amendment to the last Resolved, 'Resolved, That increasingly adequate and continuing publicity be sent members of FMA concerning organizations that fail to utilize the FMA method of determination of fees, and that the members of FMA be encouraged to insist upon fees as determined by the FMA method rather than by outside groups."

Amendment was carried.

Dr. Arthur W. Wood Jr., of Dade: "I move to amend the resolution by omitting the words, 'fee schedules' and substituting 'fees' in the first Resolved."

Amendment was carried.

Motion carried to approve the resolution as amended.

Resolution 65-14

Fee Schedules

Jackson-Calhoun County Medical Society

WHEREAS it is becoming increasingly apparent that many of our professional fees are becoming standardized, and are arrived at by the Fee Schedule Committee of the FMA after discussion with involved agencies; unfortunately, some governmental and other agencies have not consulted or agreed with FMA on fee schedules and set their fees by fiat. In view of the prevailing governmental climate as far as medical horizons are concerned, we believe organized medicine has a duty to protect its members from such methods of fee establishment; be it therefore

RESOLVED, That the Council on Specialty Medicine and the Fee Schedule Committee establish liaison with these various organizations for the purpose of arriving at fees commensurate with the value of the services performed; and be it

RESOLVED, That increasingly adequate and continuing publicity be sent members of FMA concerning organizations that fail to utilize the FMA method of determination of fees, and that the members of FMA be encouraged to insist upon fees as determined by the FMA method rather than by outside groups.

Dr. Sias announced that the Reference Committee had rewritten resolution 65-17 and at his request Dr. William H. Keeler III read the substitute motion to the House.

Dr. Keeler moved that this substitute resolution be adopted.

Dr. Fleming: "For the same reasons given before, I move that we amend this resolution by omitting the last Resolved."

Dr. Walter W. Sackett, of Dade: "The Bauer resolution has been adopted by the AMA and I cannot see why this body cannot support the action of our parent body."

Dr. Daughtry: "I think we will be criticized if we leave this resolved in. We are law-abiding and certainly we will abide by the law if a law is passed to this effect."

Dr. Frederick C. Andrews, of Lake: "The Bauer resolution has had wide publicity and is known to the public. Certainly Washington knows about it. It will only hamstring this whole resolution if you leave it out, and I think it should be left in because that is the way we feel."

Dr. Keeler: "The time has come for doctors to assert themselves; to stand and act on what they believe. There is nothing in the Bauer resolution that would suggest failure to uphold the law. What we are advocating is upholding a principle and as doctors we must stand together and uphold the principles which we hold dear in the practice of medicine.

Dr. Straight: "We feel the way this resolution is now worded it smacks of outright opposition to the will of the majority of people. It implies that we are going to take matters into our own hands and administer Medicare as we see fit. We think this is a poor time to make this statement."

Dr. Robertson, of Dade: "If the Bauer resolution is carefully read, it says 'that we will not be a willing party.' Now if this is shoved down our throat, we may be parties to it, but we don't have to be willing parties."

The amendment to the motion was lost.

Dr. Hampton announced that he had just received a telegram from the office of the Senate Finance Committee advising that he would be permitted to testify before that committee.

Motion was carried to approve the substitute Resolution 65-17.

Substitute Resolution 65-17

Medicare

(Original Resolution by Ralph Herz, M.D., Delegate)

WHEREAS the House of Representatives of these United States has seen fit to pass a combination Medicare Tax Bill without adequate public hearing, and

WHEREAS this bill is another step to an overall system of socialized medicine, and

WHEREAS this bill strikes at the heart of the best system of medical care in the world and can only result in the ultimate deterioration of the quality of medical care; now, therefore be it

RESOLVED, That the Florida Medical Association memorialize the Chairman of the Senate Finance Committee, the Honorable Harry Byrd, urging his committee to strike from the Medicare Tax Bill the Social Security financed provisions for hospital care; and be it further

RESOLVED, That this body representing more than 5,000 doctors of the State of Florida respectfully requests

that the Senate Finance Committee in its open hearings permit our representatives to appear before the committee and present the views of this Association; and be it further

RESOLVED, That our two Senators, the Honorable Spessard Holland and the Honorable George Smathers, as well as all members of the Senate Finance Committee be advised of this action through a copy of this resolution; and be it further

RESOLVED, That our delegates to the AMA House of Delegates carry this matter to that body with a vigorous call for the AMA to reaffirm their belief in the Bauer Resolution, as accepted by the House of Delegates, AMA, June 1961. [The House of Delegates of the AMA believes the medical profession will see to it that every person receives the best possible medical care regardless of ability to pay and it further believes that the medical profession will render that care according to the system it believes in the public interest and that it will not be a willing party to implementing any system which it believes to be detrimental to the public welfare.]

Dr. Sias: "I would like to thank the members of my committee, Drs. Fred A. Butler, William H. Keeler, III, and Russell B. Carson. Dr. Francis Cooke was unable to attend.

"Mr. Speaker, I move for the adoption of the Committee's entire report as amended."

Dr. Annis asked for a clarification by the Speaker as to whether Resolution 65-4 was for hospitalization only.

The Speaker stated that it was his interpretation that this did not include physicians' services.

Dr. Warren W. Quillian, Past President: "We want to point out again the importance of Reference Committees. There is a very tight agenda for this Second House of Delegates. We have many details which should be discussed and every delegate and every member of the Association is invited to attend the Reference Committee meetings to express his views. All of the Reference Committee chairmen, Dr. Anderson, Dr. Pope, Dr. Thomas and particularly, Dr. Sias, urge that you come and discuss these matters at the proper time so the committee may prepare a report more in conformity with the will of this body and not delay the meeting."

Dr. Zellner asked permission of the House to present a non-controversial resolution, which for obvious reasons could not be presented at the first House.

Permission was granted and the following resolution was passed.

Resolution of Appreciation

WHEREAS live color television as a medium for the presentation of scientific papers and discussion at this meeting of the Florida Medical Association has added greatly to the attractiveness of the scientific sessions as evidenced by the attendance at the sessions and by the rapt attention of the audience, and

WHEREAS live color television has been provided for these sessions through the courtesy of the Smith, Kline & French Laboratories; therefore, be it

RESOLVED, That the House of Delegates express to the Smith, Kline & French Laboratories its appreciation for their contribution to the success of this meeting; and be it further

RESOLVED that the Scientific Committee be commended for a job well done in presenting an interesting, informative, and attractive program.

Dr. Day: "I would like to announce that Smith, Kline & French Laboratories have put us on their permanent schedule and unless there is a direct conflict, we will hereafter get their color television."

The awards for Scientific Exhibits were announced: First Prize — "Carcinoma of the Larynx," by James R. Chandler Jr., M.D. and Alan J. Serrins, M.D., Miami; Second Prize— "Temporal Bone Banks Program," by the Florida Society of Ophthalmology and Otolaryngology; Third Prize—"Carpal-Tunnel Syndrome," by Francis L. Merritt Jr., M.D., and Frank P. Murphy, M.D., Lakeland.

The winners of the Golf Tournament were announced: The Orlando Loving Cup for low gross was won by Dr. Henry Bryant of Coral Gables; the Duval Trophy for low net was won by Dr. David K. Davis of St. Petersburg. The Par 3 prizes were won by Dr. Vernon B. Astler, Dr. James Pringle and Dr. William Wilhoit.

Dr. Evans resumed the Chair, and called for the election of officers, beginning with nominations for President-Elect.

Dr. Henry L. Harrell, of Marion: "Mr. Speaker and Fellow Delegates: This is the second time that I have had the opportunity to nominate Dr. Eugene Peek, as a representative of our delegation. Last year I gave all of his various accomplishments and I think most of you know about them. You know that he has been before you for several years as Speaker of the House, Vice President and member of the Board of Governors. For the last several years he has been a representative of our Association most of the time on trips to Washington, which we know right now under present circumstances is a very important part of the President's duties. For the next two or three years our liaison with Washington is really going to be important. We are very fortunate to have Dr. Hampton right now as this man, because as you just heard, he is going to be in a very good position when he goes up to speak for us next week. The team of Peek and Hampton has been together for several years already and I think you should continue it. Dr. Peek has not only shown that he has the ability to arbitrate and negotiate with these people, he has shown that he has the willingness and the finances to do

it. Dr. Day will be the first to admit that the President needs a little extra finances while he is in office. Dr. Peek will listen to advice from everyone, (he is used to working with Harold Parham) and actually two years' preparation for our President should be the right order of events, because it is such an important position. He is cool-headed; he won't fly off the handle like some of us. In the name of the Marion County Medical Association, I propose Dr. Eugene Peek as President-Elect."

Dr. James L. Patterson, of Hillsborough: "We have the opportunity to choose as our President-Elect today a physician with a rich medical heritage in Florida, who has the experience, the competence and the drive to provide leadership of the kind we must have in the Florida Medical Association. The next two years will be the most difficult and the most trying in the history of our Association. In times like this, we must select leaders who can lead us with dignity, devotion and sound judgment. I believe Gene Peek meets these qualifications; therefore, I second the nomination of Dr. Eugene L. Peek Jr. for President-Elect of the Florida Medical Association."

Dr. Walter C. Jones, Past President: "Mr. Speaker, Members of the House of Delegates: For the second time I have had this privilege of seconding Gene Peek's nomination. I am thoroughly convinced that Gene is qualified and has the ability to carry out the duties of this strenuous office. I take great pleasure, as an individual, in seconding the nomination of Dr. Gene Peek."

Dr. Richard C. Clay, of Dade: "Mr. Speaker, Mr. President, Fellow Delegates: I want to place in nomination for the office of President-Elect the name of Dr. George S. Palmer of Tallahassee. This I do with a great deal of pride and personal satisfaction derived from friendship of 25 years, dating from periods as a medical student, intern, resident and fellow member of this organization.

"George Palmer's father was a practicing Tallahassee physician and a past president of the Florida Medical Association. George himself is a graduate of the University of Florida and of Johns Hopkins Medical School. He is a licentiate of the American Board of Pediatrics and a member of several national specialty societies, but he has not allowed his pursuit of professional excellence to interfere with his diligent function as a member of organized medicine. He has served as president of his county medical society and has been chairman of its Grievance Committee for three years. He has a distinguished record of service to the FMA, having been a member of its Council in 1953-55 and of its Board of Governors for two years as well. He has been chairman of the Committee on State Legislation for the past two years, and also served on the Committee on Hospitals for two years, one year as chairman. His present position as Key Contact physician with the congressional delegation from his district assures his close touch with legislative matters, and his membership for 12 years on the Board of Directors of Blue Shield assures us of his cognizance of matters of medical economics. In addition George has served for eight years as a member of the Board of Medical Examiners for the State of Florida and for one of those years he was its president.

"I would like to add from my personal knowledge that George Palmer is a thoroughly pleasant, highly intelligent and utterly likeable, thoroughgoing gentleman. I feel and I think you will all agree that the next two years, as has been pointed out by previous speakers, will be years in which the ship of Florida Medicine will be sailing on uncharted waters. These waters are likely to be filled with political shoals, perhaps beset by economic storms and possibly even infested by governmental pirates. During such a crucial period, we need a helmsman with a firm and steady hand, an alert and agile mind, and a broad base of experience. I know no member of our organization, Mr. Speaker and Members of the House, who so ideally combines these essential qualities as Leon County's George S. Palmer."

Dr. Francis T. Holland, AMA Delegate: "I am here as your AMA Delegate, but I am also representing the Leon-Wakulla-Jefferson County Medical Society in seconding the nomination of Dr. George Palmer. When I first came to Tallahassee, his father gave me constant guidance in the practice of medicine, instilled confidence in me and I have known George from the time he graduated and came to Tallahassee to practice. He has been not only an outstanding practitioner, but also an outstanding citizen. I second the nomination of George S. Palmer."

Dr. Hall, of Manatee: "I represent the Manatee delegation in having the privilege to second the nomination of George S. Palmer as President-Elect. His foundation in legislative principles in Tallahassee and in Washington is known to all of us. His foundations in medicine go back to his father, who was at one time president of this organization, and my only hope is that he

can brush up on his tennis to keep up with Dr. Day and Dr. Hampton."

Dr. Steward, of Orange: "I have had the opportunity of working with Dr. Palmer probably more closely than many of you because I had the privilege of serving with him on the Blue Shield Board for some five years before he finished his terms of a total of nine years. I can speak for Dr. Palmer as a physician of the highest ethics and the greatest ability and it gives me great pleasure to second the nomination."

Dr. Al T. Kennedy, of Escambia: "I cannot add to what has been said but I would like to second the nomination of Dr. Palmer and wish him well."

Dr. Keeler, of Pinellas: "It is indeed an honor as a relative newcomer to the House of Delegates to stand before you and be permitted to second the nomination of Dr. George S. Palmer. I have attended five FMA meetings and during this time I can assure you that I have never been more impressed by a man for his hard work, his unfailing principle and his untiring ability and devotion. It is a great pleasure and an honor as a representative from Pinellas County to second the nomination of Dr. George S. Palmer."

Motion was carried that nominations be closed.

Drs. Joseph C. Von Thron, Sanford A. Mullen and William F. Shaver were appointed as tellers.

While waiting for the tellers to count the ballots, the House requested that the Speaker proceed; so he asked for nominations for Secretary-Treasurer.

Dr. G. Dekle Taylor, of Duval: "I would like to nominate for the office of Secretary-Treasurer, a man who is known by his work. The members of the Duval delegation would like to again nominate Dr. Floyd K. Hurt, who has served so efficiently and faithfully in this capacity in the past."

As there were no other nominations, a motion was carried that a unanimous ballot be cast for Dr. Hurt.

Dr. Hurt: "I appreciate your confidence. As a matter of fact, most of the work of this organization is done by Harold Parham and his staff. My job is relatively simple. I work with Harold and we try to do the best job we know how. Thank you very much for your vote of confidence."

The Speaker called attention to the Board of Governors' nominations for the Committee on Membership and Discipline as shown on pages 32-33 of the Handbook and asked for additional nominations from the floor.

As there were no additional nominations, motion was carried that nominations be closed and the Secretary cast a unanimous ballot for the following:

District 4	Jack Q. Cleveland, M.D., Miami	1969
District 8	William C. Thomas, M. D., Gainesville	1969
District 9	James T. Cook, M.D., Marianna	1969
District 10	C. Frank Chunn, M.D., Tampa	1969
District 11	Thomas C. Kenaston Sr., M.D., Cocoa	1969
District 12	Edward L. Cole Jr., M.D., St. Petersburg	1969

Dr. Irving Hall, of Manatee, asked that Mr. Parham introduce the members of his staff. All those in the room at the time were introduced.

The Speaker announced that Dr. George S. Palmer was elected President-Elect.

Dr. Clay and Dr. Holland escorted Dr. Palmer to the rostrum.

Dr. Palmer: "Thank you very much. I am as nervous as a jay bird and proud as a peacock. I only want to say I will do my best. I won't promise anything except as long as we adhere to our principles and do what we think is right in our own hearts for the Association, for our patients, and for the people we represent, we can hold our heads high, look anyone in the eye, and apologize to no one. Thank you."

The Vice Speaker assumed the Chair, and asked for nominations for Vice President.

From the floor, Dr. Eugene G. Peek Jr. was nominated for the office of Vice President and the nomination was seconded.

No other nominations were made and the Secretary was instructed to cast a unanimous ballot for Dr. Peek.

Dr. Peek: "Thank you. I won't have to change my badge."

The Vice Speaker asked for nominations for Speaker of the House.

Dr. Murphree, of Alachua: "I appear in this capacity for the fifth time. I don't believe it is necessary to repeat the curriculum vitae of my nominee. I have it memorized letter perfect but you have heard it too many times. At this point I would like to call your attention to his more than adequate, to his superb handling of the parliamentary procedure both at the House of Delegates meeting in Jacksonville this spring and at this present meeting. I would like to place in nomination the name of Dr. Franklin J. Evans to succeed himself."

As no other nominations were made, the Sec-

Dr. George S. Palmer of Tallahassee, elected President-Elect, is escorted to the platform by Dr. Francis T. Holland (left) of Tallahassee and Dr. Richard C. Clay of Miami.

retary was instructed to cast a unanimous ballot for Dr. Evans.

The Speaker resumed the Chair and asked for nominations for Vice Speaker.

Dr. William C. Roberts, Past President, nominated Dr. James T. Cook.

No other nominations were made and Dr. Cook was elected unanimously.

The Speaker asked for nominations for Delegates to the American Medical Association, two delegates and two alternates for two year terms beginning January 1, 1966 and expiring December 31, 1967.

Dr. Lawrence E. Geeslin, of Duval, nominated Dr. Robert E. Zellner, of Orange.

Nomination was seconded by Dr. Charles R. Sias, of Orange, and Dr. Rowland E. Wood, of Pinellas.

Motion was carried that nominations be closed and the Secretary be instructed to cast a unanimous ballot for Dr. Zellner.

Dr. Day: "I would like to speak a word of appreciation to Dr. Meredith Mallory who did not seek reelection at this time. He has done a wonderful job for us through the years."

Dr. Reuben B. Chrisman Jr., Chairman, AMA Delegation: "I too would like to express on behalf of the AMA Delegation, our great appreciation to Dr. Mallory for the services he has performed for Florida medicine."

The House gave Dr. Mallory a rising vote of thanks.

Dr. William M. Straight, of Dade, nominated Dr. Ralph Jack as alternate delegate for Dr. Zellner.

As there were no other nominations, motion was carried that the Secretary be instructed to cast a unanimous ballot for Dr. Jack.

Dr. Edward W. Cullipher, of Dade, nominated Dr. Burns A. Dobbins Jr. of Broward, as Delegate to the American Medical Association.

No other nominations were made and motion was carried that the Secretary be instructed to cast a unanimous ballot for Dr. Dobbins.

Dr. Walter W. Sackett Jr., of Dade, nominated Dr. Walter E. Murphee, of Alachua, as Alternate Delegate for Dr. Dobbins.

Motion was carried that nominations be closed and the Secretary be instructed to cast a unanimous ballot for Dr. Murphree.

The Speaker stated that since Dr. Zellner was elected delegate, it would be necessary to elect an Alternate Delegate for Dr. Chrisman.

Dr. James T. Cook nominated Dr. Eugene G. Peek Jr.

Dr. Warren W. Quillian, Past President, nominated Dr. Samuel M. Day.

Dr. Peek requested that his name be withdrawn and asked that the House cast a unanimous ballot for Dr. Day.

The Secretary was so instructed.

The Speaker asked Dr. Eugene B. Maxwell and Dr. William W. Trice Jr. to escort the incoming President, Dr. H. Phillip Hampton, to the rostrum.

Dr. Day: "Today it gives me great pleasure to turn this rostrum over to Dr. Hampton. I have here the President's gavel which I know he will wield well. It gives me the greatest pleasure I have had in some time to relinquish this gavel at this time. Dr. Hampton, best of luck!"

Dr. Hamption: "I want to express my appreciation of this honor and of the opportunity to advance and serve the purposes of this Association. I also want to express to the Association my intention to turn during the year from legislative matters and return to emphasis on medical education and medical science. I want to express my appreciation to the Board of Past Presidents in their resolution which was just handed me extending their greetings and congratulations and offering their counsel and advice, which I assure you I will need and will take full advantage of.

"The Immediate Past President expressed his admonition to the incoming President to brace himself if he did not follow the wishes of the Association. A President is obligated to follow the consensus, but also to lead in accomplishment of the purposes of the organization. This may be a play on words, but sometimes this is most important.

"Recently we have been occupied with state and national legislation by necessity. Ten years ago, we established in Florida a demonstration project of providing tax-supported health care for those in financial need in accordance with traditional state constitutional obligation. Five years ago, such programs were encouraged by federal reimbursement for some of such state expenditures. Now before the Congress is a bill that will improve the present program of tax-supported health care for those in need, but will also establish a new principle of government—federal obligation to provide personal services as a right of citizenship, at this time limited to all of those over 65 years of age. I have your directions concerning presentations that should be made to the Senate Finance Committee and we will shortly discuss the implementation of those directions and the details in the Board of Governors meeting this afternoon. But in order to maintain personal and professional freedom essential to our purpose of providing the best medical care to all of the people, we must in today's environment establish two funds, one for political action to encourage government dedicated to the preservation of personal freedom; the other, for medical action to encourage the advancement of medical knowledge and administration of medical care. I propose we use the first one to employ qualified personnel to fulfill its purpose and release our energies to use the second fund to insure the cooperative effort of physicians in furthering medical knowledge and medical care, and I so dedicate myself. Thank you."

Dr. H. Phillip Hampton of Tampa addresses the House of Delegates following his installation as President.

Dr. Hampton presented to Dr. Day the Past President's button and affixed it to the lapel of his coat.

Dr. Hampton asked Dr. Dekle Taylor and Dr. John Terry to escort Mrs. Samuel M. Day to the rostrum.

Dr. H. Phillip Hampton of Tampa presents the photograph of Dr. Samuel M. Day to Mrs. Day as one of his first official acts after being installed as President of the Association.

Dr. Hampton: "It gives me great pleasure to present to you this picture of Dr. Sam Day, whom you may recognize as your husband."

Mrs. Day: "Dear Delegates and Friends: April is a very happy time of year, but especially when one is the wife of a President of the Florida Medical Association. I thank you, not only for this handsome picture of my husband, but also for fifteen years of friendship which you have extended to him. In anticipation of this gift, I have chosen the very spot to hang it in my home, and I know that you will know what I mean when I say that now, at last and at least, I can grow accustomed to his face."

Dr. Hampton announced the post-convention Board meeting to be held in the Yucatan-Aztec room immediately following adjournment.

Dr. Dekle Taylor gave the benediction.

The meeting was adjourned at 1:50 p.m.

Attendance at 91st Annual Meeting Florida Medical Association

Registration for the Annual Meeting held at Bal Harbour, April 22-25, reached a total of 2,170 for the four days, Thursday through Sunday. Of the total, there were 1,201 physicians, 437 members of the Woman's Auxiliary, 290 scientific and technical exhibitors and 242 other guests.

President's Page

The Future

Recently we have been occupied with state and national legislation by necessity. Ten years ago, we established in Florida a demonstration project of providing tax-supported health care for those in financial need in accordance with state constitutional obligation. Five years ago, such programs were encouraged by federal reimbursement for some of such state expenditures. Now before the Congress is legislation that will improve the present program of tax-supported health care for those in need, but will also establish a new principle of government—federal obligation to provide personal services regardless of financial need and as a right of citizenship, at this time limited to all of those over 65 years of age. In order to survive in today's environment and maintain personal and professional freedom essential to our purpose of providing the best medical care to all of the people, we must establish two funds, one for political action to encourage government dedicated to the preservation of personal freedom; the other, for medical action to encourage the advancement of medical knowledge and administration of medical care. We should use the first one to employ qualified personnel to fulfill its purpose through the FLAMPAC and AMPAC organizations and release our energies for the second fund to insure the cooperative effort of physicians in furthering medical knowledge and medical care. How to build the funds is the problem.

H. Phillip Hampton

Editorials

A Critique of the Florida Medical Association 1965 Annual Meeting

Early this spring I was requested by Dr. Thad Moseley, Editor of The Journal of the Florida Medical Association, to bring together a critique of the annual convention of the Florida Medical Association, held at Miami Beach in April 1965. An evaluation of this meeting is therefore presented.

The most disillusioning, frustrating memory of past FMA meetings, from a delegate's viewpoint, has been and still is the final meeting of the delegates on Sunday morning. It leaves one with a feeling of futility and worthlessness. One is annoyed by the confusion and lack of common understanding of purpose that plague one as he departs from this meeting. What have we accomplished? What are our goals? What are our objectives for the next year? Are we really a purposeful, responsible community of physicians, or are we here to preserve our way of life first, taking into secondary consideration that which is best for the citizens of Florida? Such thoughts, along with many others, linger in one's mind long after one has departed the meeting, and this year was no exception.

Comparing this recent FMA meeting with others, one would have to say that this has been a well planned, well organized annual meeting. It was reasonably well attended, attracting approximately one fourth of the membership. The scientific program was good and attended, as usual, by the same number of members who attend our scientific meetings. The organization, from the point of view of service by the FMA staff and personnel, was very well carried out. The Auxiliary activities were adequate and met the demands of the members attending with no outstanding objections being heard or brought forth by solicitation. There is need for imagination and new energy to evolve from the membership. We are in need of new ideas in the Auxiliary and in the Association that will interest more members from the nondelegate portion of our membership.

The scientific and commercial participants were fewer in number. This decrease, I am informed, is the result of competition in the field, but at this particular time I do not think that we can accept this explanation as the whole answer. We must investigate this trend which indicates a lack of interest by the scientific and commercial participants in the parent organization of Florida medicine. This needs exploration and one idea I should like to advance is that there is need now for a clearinghouse for medical meetings in Florida. This great dilution is reflected in the FMA meetings. Too many conflicting meetings are being held at the same time. We should activate an FMA committee to serve as a clearinghouse for medical meetings in Florida.

Specific suggestions are presented that could, I believe, facilitate the functioning of the annual meeting and make this agonizing reappraisal less agonizing as the years ensue:

The Reference Committee system has apparently failed to achieve its intended purpose. As we sit through the reports, we obviously come to the one conclusion that difficult and controversial issues are referred to the Board of Governors time and time again. Obviously this referral is because no other group within the Florida Medical Association has the power or the responsibility to cope with these difficult problems. This may seem to be the proper action to take. In fact, you and I both recognize that the most knowledgeable members in most of the controversial fields within our organization are on the Board of Governors. Yet, there is another point of view that should be added, namely, those members of the Board of Governors tend to perpetuate themselves and when we defer an item of common interest and great import to this group, as is being done

year after year, those in the position to make decisions tend to perpetuate their own thinking, and their own decisions based on their thinking. The idea might be advanced, as it has been before, that the Florida Medical Association needs a policy and planning committee made up of responsible elements from all segments of the membership to steer, guide, set goals and objectives with the stability and responsibility of the parent organization solely in mind.

The second suggestion, regarding the Reference Committees, is that the Reference Committee meetings be staggered and that no conflicting program interrupt or be held at the time the Reference Committees are meeting. In addition, the Reference Committee should be attended by those knowledgeable in the subjects presented. I am saying here that we have very responsible members of the Florida Medical Association who are most knowledgeable in certain aspects of our problems. What I am further saying is that these members should, at the direction of the administration, be in attendance at Reference Committee meetings to provide the committees with the benefit of their knowledge.

Third, a resolution brought to the Reference Committee must have a sponsor, else the resolution is automatically dead. It would amount to a motion without a second and should therefore die. If a proponent of a resolution has not enough interest to appear and explain it, the resolution and its sponsor are not worth consideration.

Fourth, a representative from the Board of Governors should be assigned to each Reference Committee to inform the members of current thinking of the Board.

Fifth, the chairmen and Reference Committee members should be able, learned and discreet men who understand the matters at hand and who can report on the current status of any given measure.

Sixth, I believe that all Reference Committee reports should be in hand 12 to 24 hours before the final meeting of the House of Delegates. Further, all resolutions should be filed by 6 p.m. the evening preceding the first delegates' meeting. Moreover, any resolutions presented after this deadline should be accepted only by unanimous consent of the delegates. All resolutions should be in writing so that the delegation has in hand the resolution that is being discussed.

The President should make a report prior to the transaction of any business by the House of Delegates. His report should include any victories and any failures of the previous year. It should include any hopes and dreams, and state policies to be crystallized. This would establish an overall plan of action by the House.

If I, as a delegate to the FMA who pays a fair amount of attention to the function of the parent organization, cannot keep myself abreast of the programs and policies of the Association, then the responsible person in the organization, who is the President, should inform me at the meeting. This additional thought should be added: As a delegate, who annually attends this meeting, I find it most distressing to reflect on how much lack of information exists among the three fourths of the total membership who seldom attend these meetings. These members need to be reached by one means or another and by whatever ingenuity is needed to arouse them with whatever money needs to be spent.

If we achieve nothing else in our preparation for the next meeting, I would strongly urge that we have comfortable chairs to sit on, that we have room to sit down with a table to put our papers on, and that we no longer allow the hotel people to jam us into a sardine can-type of atmosphere and expect us to think and function intelligently. Moreover, we are inadequately equipped with microphones. If we expect the membership at the delegates' meeting to be more responsive, I believe making the microphones more readily available will bring a desired response.

Set aside rooms for caucus and publicize the availability of these rooms for groups who would like to meet. This provision would encourage more caucusing and discussion prior to the final delegates' meeting.

I would suggest that the nomination of officers be held at the first meeting of the House of Delegates, and that the election be held at the second meeting.

I would also suggest that since we have arrived at a maximum number of delegates, the ratio of delegates to members should now be 1 to 50 with no county to have less than one delegate. This representation would make for a more workable organization. Another suggestion is that alternates be abolished for the purpose of maintaining the dignity and status of the members of the House of Delegates.

There is need for improving the registration of delegates. I understand this procedure is in the process of reorganization.

I would suggest that numerical margination in lines of 10 along the left margin of the pages of the Handbook would add greatly to the quick identification of items under discussion.

Trivial items, such as introduction of golf and various other prize winners, guests who may or may not be present, and such other distractions which cause a breakdown in organization of the first meeting of the House of Delegates should not exist. It would seem to me that when we have guests who deserve recognition, the Secretary should have this information in advance and have the guests sit in a position where they can be seen by the members. If they are not in attendance, they should not be announced.

I would urge the Association to continue its present thinking in regard to the planning of the scientific meetings. The changes that have occurred within the past six years seem to be sound. I do not believe that at this time we can deviate from this philosophy.

Another suggestion is that staff badges be made available to staff members of the county medical associations who are required to attend Reference Committee hearings.

The recent expansion of the medical sciences has given rise to the development of specialists in so-called environmental medicine. This comprises specialists in politics, law, public relations, public health, executive directors and secretaries, insurance experts, health education and welfare personnel and experts, family counseling and planning, medical librarians, medical secretaries and assistants, hospital administrators, medical technologists and others. Knowledgeable representation from these various fields must be made available to the responsible administrative personnel of the Florida Medical Association. This representation will put the Association in a position to exercise direction and counseling and some limited control by the parent medical association.

Historically, organized medicine strove to set its own house in order. Its broader goal now is to furnish a well ordered medical house for the citizenry of Florida.

Walter J. Glenn, M.D.
Fort Lauderdale

Future Meetings

The scientific sessions at the 1965 annual meeting of the Florida Medical Association were well organized, and the Scientific Council is again to be commended. The speaker selection was excellent, and the closed circuit color television was effective. Attendance, while better than last year, was still poor considering the number of physicians registered at the meeting. As to the scientific exhibits, there were only 11 on display. This is a new low for recent years.

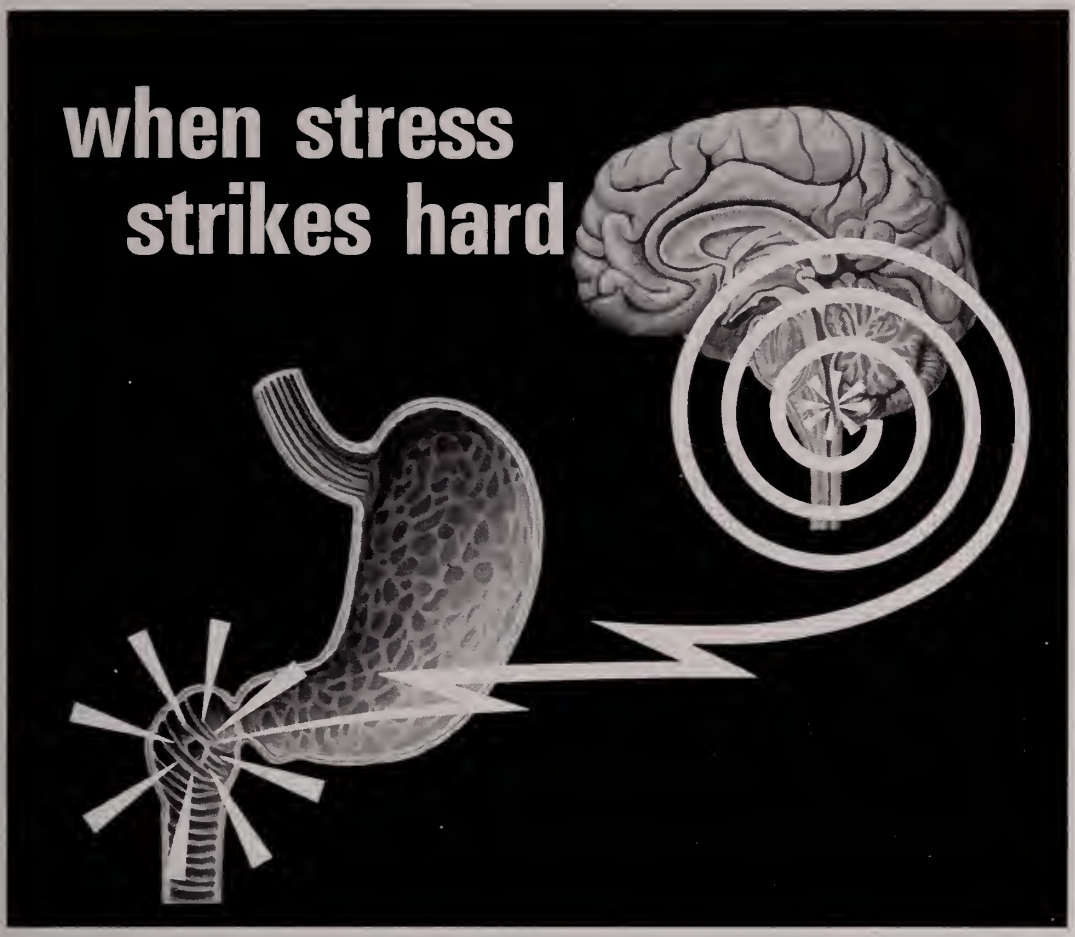
The Florida Medical Association must decide its future role in postgraduate education of the practicing physician. With the increasing threat of socialized medicine on the horizon, it is important that we become informed on the politico-socio-economic aspects of medicine. But should we do so to the exclusion of postgraduate education? I think not. What should we then do with future meetings?

In order to arrange scientific sessions that are both convenient and appealing, perhaps one should consider the different motivations of the physicians attending the annual meetings. There are the delegates and the various officers and council heads of the Florida Medical Association. These physicians are in attendance to try to transact business, decide future policies of the Association, and elect a president and other officers. There is an equally large or larger number of physicians who are not particularly interested in the politics of the organization. They come to the meeting because they enjoy a brief vacation in pleasant surroundings mixed with a bit of medicine plus the opportunity to renew old acquaintances. The remaining group is small and consists of physician exhibitors and participants in the scientific program.

The following suggestions are made in an attempt to increase attendance and participation in the scientific sessions.

1. The scientific portion of the annual meeting is deserving of more attention since it could be of value to all of the physicians attending the meeting.

2. Abandon the general sessions and have the various specialty sections responsible for the



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program. It is virtually impossible to select a speaker with a medical topic of interest to all physicians. With an arrangement as suggested the general practitioner and specialist could attend the meeting that was of most interest to them. The Florida Medical Association would in turn share the expenses of guest speakers with the specialty groups.

3. More participation should be encouraged from the staffs of the two medical schools in the state.

4. Scientific sessions should be held only in the mornings. This plan would leave the afternoons free and would undoubtedly increase attendance.

5. No meetings should be scheduled to conflict with those of the House of Delegates or the Reference Committees. This change could be accomplished by moving the latter meetings to the afternoons. Inasmuch as the delegates are usually either meeting or caucusing most of the day, the change suggested should not jeopardize their attendance.

6. Request approval by the Florida chapter of the American Academy of General Practice for accreditation for attendance at the various scientific meetings.

7. Encourage more scientific exhibits by: (a) Placing them in a more conspicuous and convenient place rather than giving the drug companies and the medical supply houses the choice space. (b) Award additional prizes and announce them earlier. Each specialty section and the Florida chapter of the AAGP could be asked to award prizes or citations for the exhibit that they think is best. The drug companies and the medical supply houses might be another source of awards. (c) The committee that selects the prizes for the Association should be composed of physicians who have participated in scientific programs or exhibits themselves.

Our annual state medical meeting is a wonderful place to enjoy a bit of relaxation and to renew old and make new acquaintances, but it should also offer us an opportunity to sharpen our medical wits and to increase our medical knowledge.

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You Could Have Been There

Despite the cumulus clouds of adverse national legislation on the horizon, the 1965 annual convention of the Florida Medical Association commenced, as it finished, a stimulating, living example of democracy in action. Unique in the approach, Dr. Samuel M. Day, in his presidential address, looked to history, thus eliminating the "platitudes and preaching" common in the past. In its place he paid tribute to our very first President of the Association, Dr. Baldwin, who was a leader in medicine and active also in the fields of botany, water conservation, and government. Dr. Day's discussion, one would conclude, reiterated how no physician in the 1800s or today can remain immune to the affairs of state. Problems have been overcome by our predecessors, and with diligence on the part of all of us, we also can calm the troubled seas confronting medicine today.

In contrast to Dr. Day's historical references, the scientific sessions were certainly contemporary to twentieth century living. Through the courtesy of Smith, Kline & French Laboratories, live color television enabled the viewers to be first assistants at the operating table, to interview learned educators, and/or actually to make grand rounds in the

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comfort of their chairs in the auditorium. New concepts of coronary vascular surgery in such an electrifying atmosphere emphasized the vastly different era existing now, as opposed to the 1800s. This medium of communication could only augment learning and attendance.

The wise recessing of the Reference Committee meetings enabled all to hear the renowned educator, Dr. George T. Pack, seemingly follow the theme started by Dr. Day, as he too scanned history in attempting to bring up to date current ideas on research regarding cancer.

Erudite and alert as usual, Dr. Franklin J. Evans, Speaker of the House, conducted the two meetings of the House of Delegates, the last of which required perseverance as debates on recommendations from the Reference Committees developed.

It has been well said that the Florida Medical Association never looks for a leader for he always appears when the need arises, and so, the capable Dr. George S. Palmer was selected as President-Elect.

And of course, no meeting is complete without the woman's touch. Mrs. (Dolly) Day beautifully rendered a short eulogy to her husband as she accepted his portrait and remarked, "Now I can grow accustomed to his face."

These are only the highlights. There is so much more—exhibits, golf tournament, fishing trips, Les Femmes, the President's reception, the FLAMPAC breakfast, the glamour of the lovely Americana, and the thought-provoking discussion with one's colleagues.

As one attempts to interpret the function of such a great meeting as this, he must reflect the opportunities afforded a physician to glean not only scientific knowledge, but also training in leadership and the practical aspects of medicine.

An old saying well worth repeating is "You get out of anything exactly what you put into it." Actually, in the words of Whittier, "We reap as we have sown." Criticism????? If you have any, you did not try very hard if you were there, and for those others—you could have been there. Next year??????

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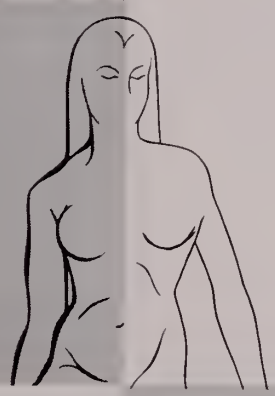

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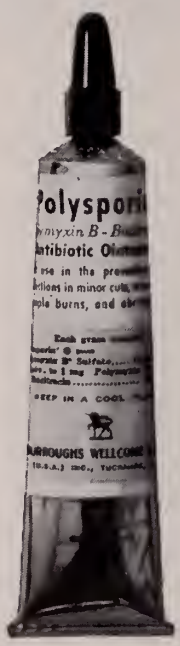

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* AMA Council on Foods and Nutrition: The Regulation of Dietary Fat, *JAMA* 181:411-423 (August 4, 1962).
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*Dorhout Mees,E.J.,and Geyskes, G.G.: Acta med.scandinav. 175:703,1964.

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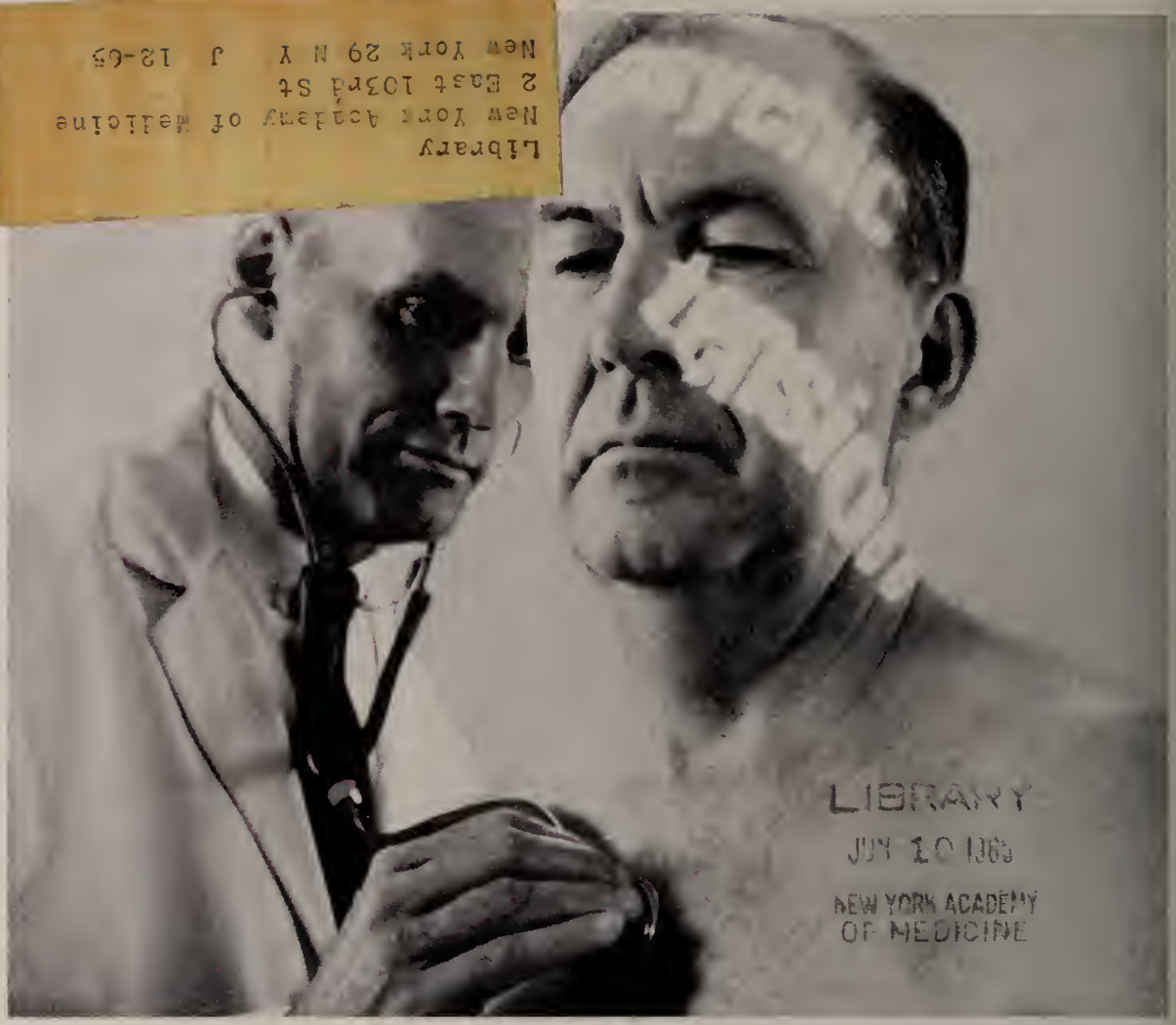

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Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

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Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances and hallucinations) and changes in EEG patterns. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

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Valium® (diazepam)

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ROCHE

July, 1965
Vol. 52, No. 7

The JOURNAL of the Florida Medical Association

MEDICAL HISTORY IN FLORIDA

- Medical Leadership
- History of Orange County Medical Society
- Frontier Physician of Dade County
- Medical Highlights of Florida's West Coast
- Don Juan Ponce de Leon
- Medical Men and Medical Events of Early St. Augustine

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The JOURNAL
of the Florida Medical Association

Volume 52, Number 7, July 1965

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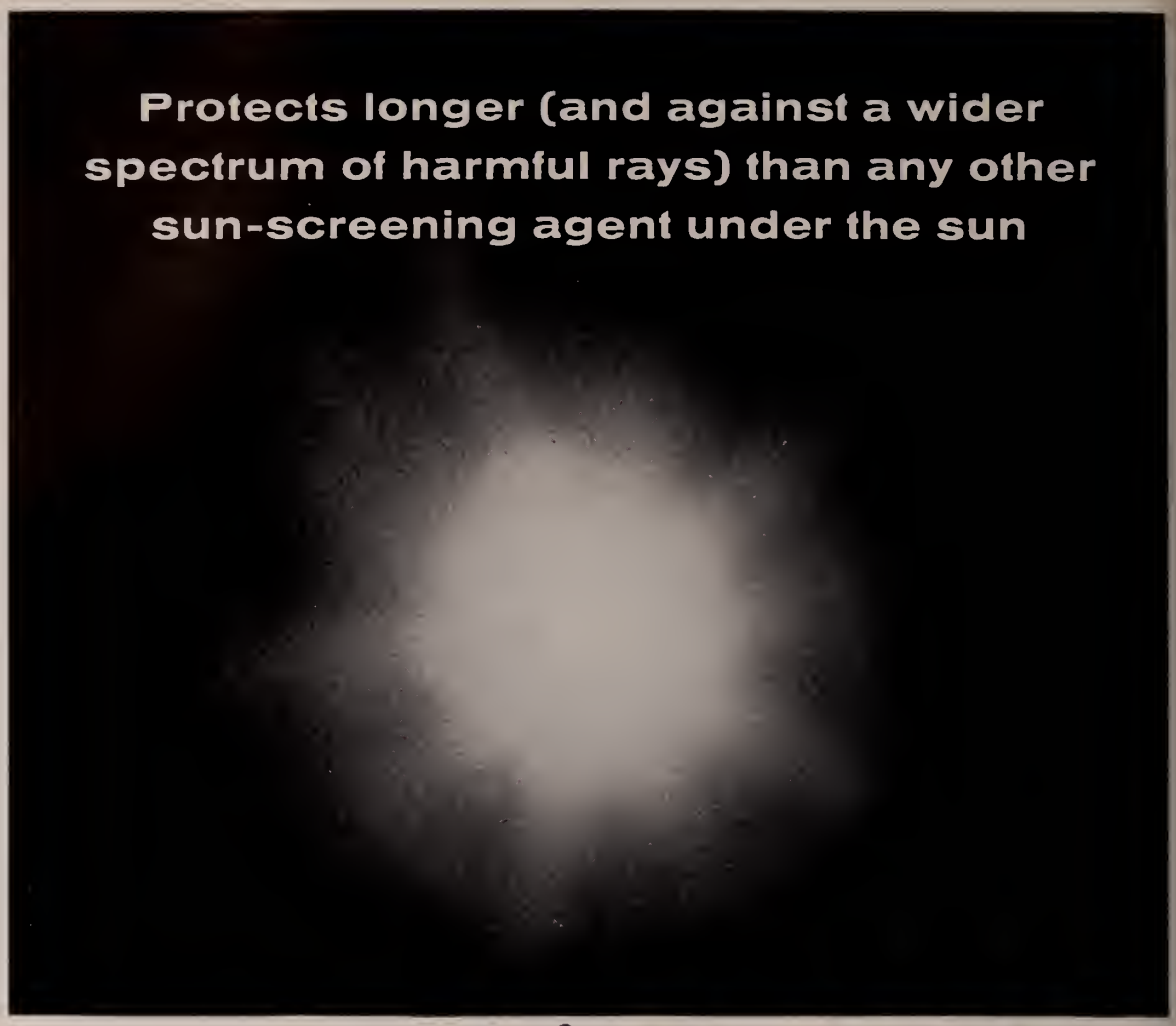

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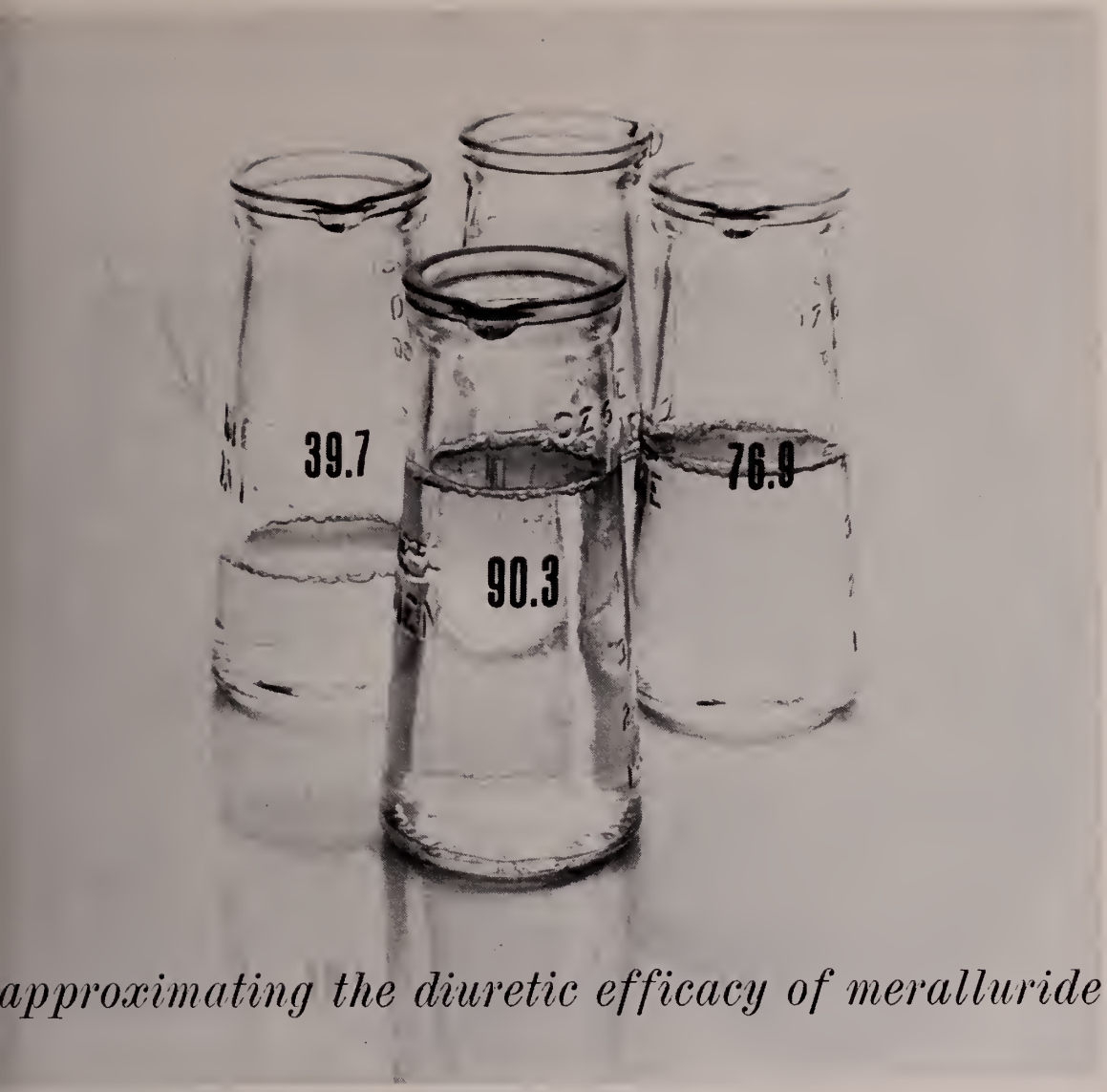

approximating the diuretic efficacy of meralluride

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To determine the relative efficacy of thiazide diuretics in congestive heart failure, Metahydrin (trichlormethiazide) and three other thiazides were measured against Mercuhydrin® (meralluride injection)—the standard diuretic. "The results leave little doubt that the diuretic efficacy, that is, the 'ceiling effect' in these terms, is not the same for different thiazides."* The assays ranged from about 40% of the effectiveness of Mercuhydrin through 67%, 77% to 90% for Metahydrin. The latter two values were thought to be significantly different from the lowest value and to be therapeutically important.

*Gold, H., *et al*: Closed Panel Conference: Present Status of the Management of Congestive Failure and Advances in Diuretic Therapy, Journal of New Drugs, 1:177, July-August, 1961.

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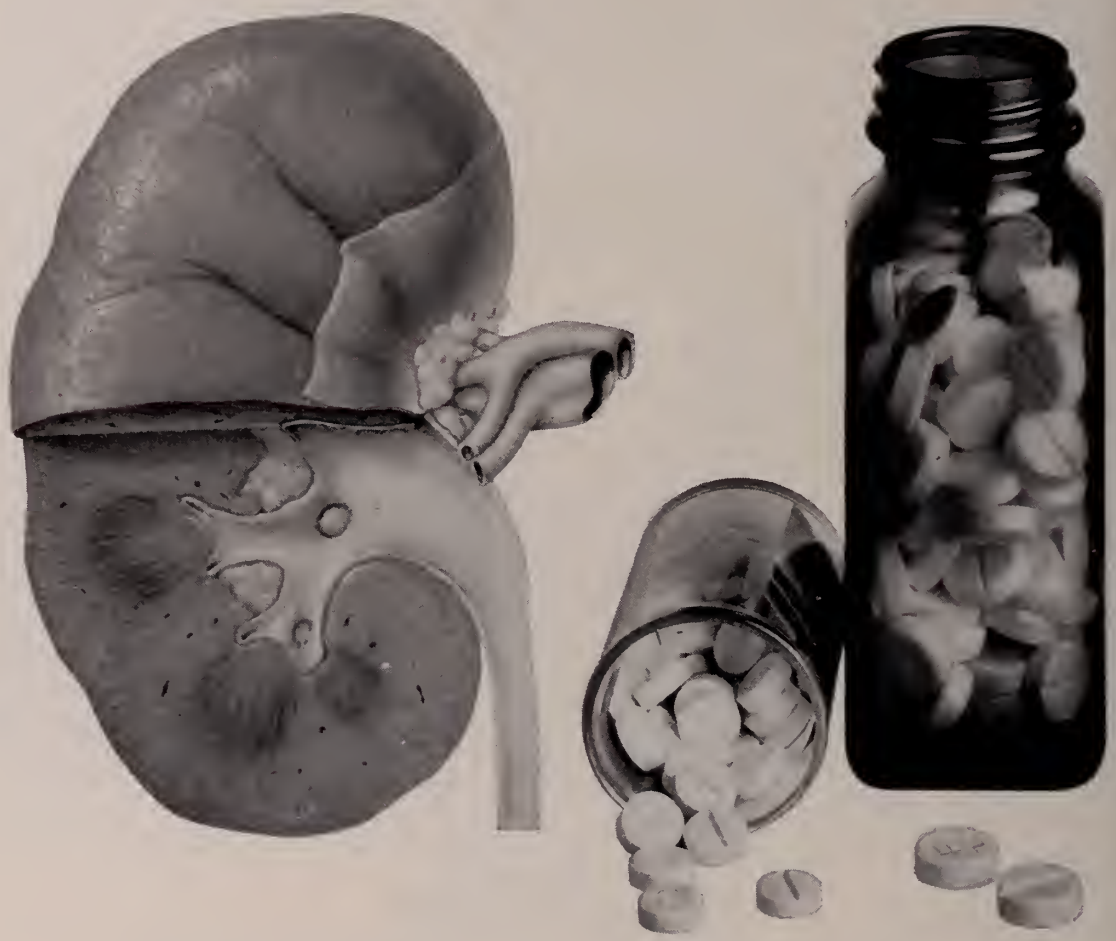
SIDE EFFECTS: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have been occasionally noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by administration of thiazides.

CONTRAINDICATIONS: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

HOW SUPPLIED: Bottles of 100 and 1000 tablets.

at Merck Sharp & Dohme...



understanding... precedes development

The development of chlorothiazide and probenecid were events of major importance, but perhaps even more important for the future was the Renal Research Program by which they were developed. When Merck Sharp & Dohme organized this program in 1943, it was expressing in action some of its basic beliefs about research:

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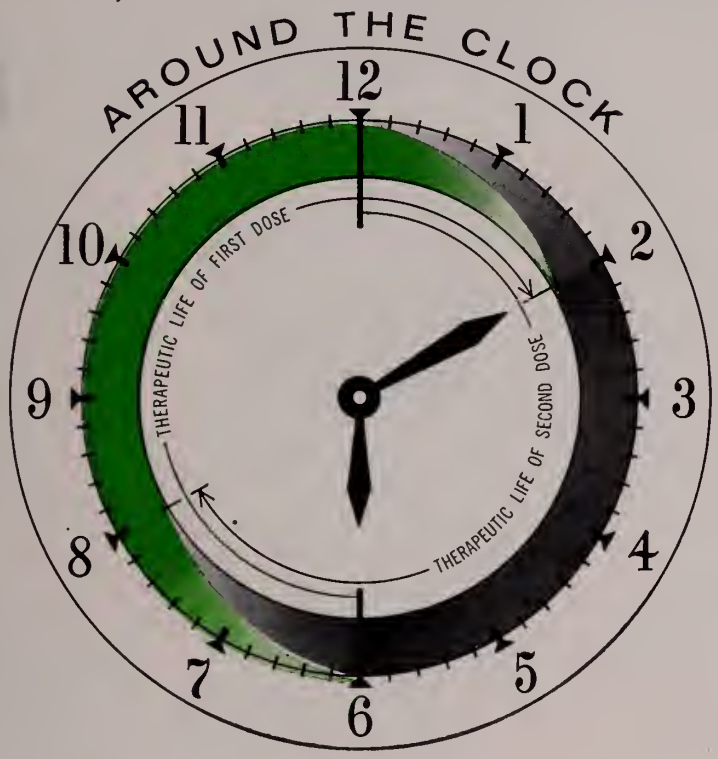
where today's theory is tomorrow's therapy

MILD, CONTINUOUS SEDATION



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References: 1. Carpenter, E. B., South. M.J. 51:627, 1958. 2. Crookshank, J. W.: J. Louisiana State Med. Soc. 114:272, 1962. 3. Feinberg, I., et al.: Am. J. Orthoped. 4:280, 1962. 4. Fitzgerald, W. J.: Miss. Valley M.J. 82:146, 1960. 5. Forsyth, H. F.: J.A.M.A. 167:163, 1958. 6. Meyers, G. B., and Urbach, J. R.: Penna. M.J. 64:876, 1961. 7. Truitt, E. B., Jr., Morgan, A. M., and Nachman, H. M.: South. M.J. 54:318, 1961. 8. Weiss, M., and Weiss, S.: J. Am. Osteopath. Assn. 62:142, 1962.

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Aspirin (5 gr.) ..... 325 mg.

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Dosage: For infants and young children, 15 mg to 25 mg per pound of body weight per day in four to six divided doses. For larger children, the adult dosage scale of 1 to 2 grams per day.

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Precautions: Side effects are relatively rare. Should a patient show signs of hypersensitivity, appropriate countermeasures (e.g., administration of epinephrine, steroids, etc.) should be employed and the drug withdrawn.

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*Done, A. K., in Drugs of Choice 1964-1965, Modell, W., ed., St. Louis, The C. V. Mosby Co., 1964, p. 66.

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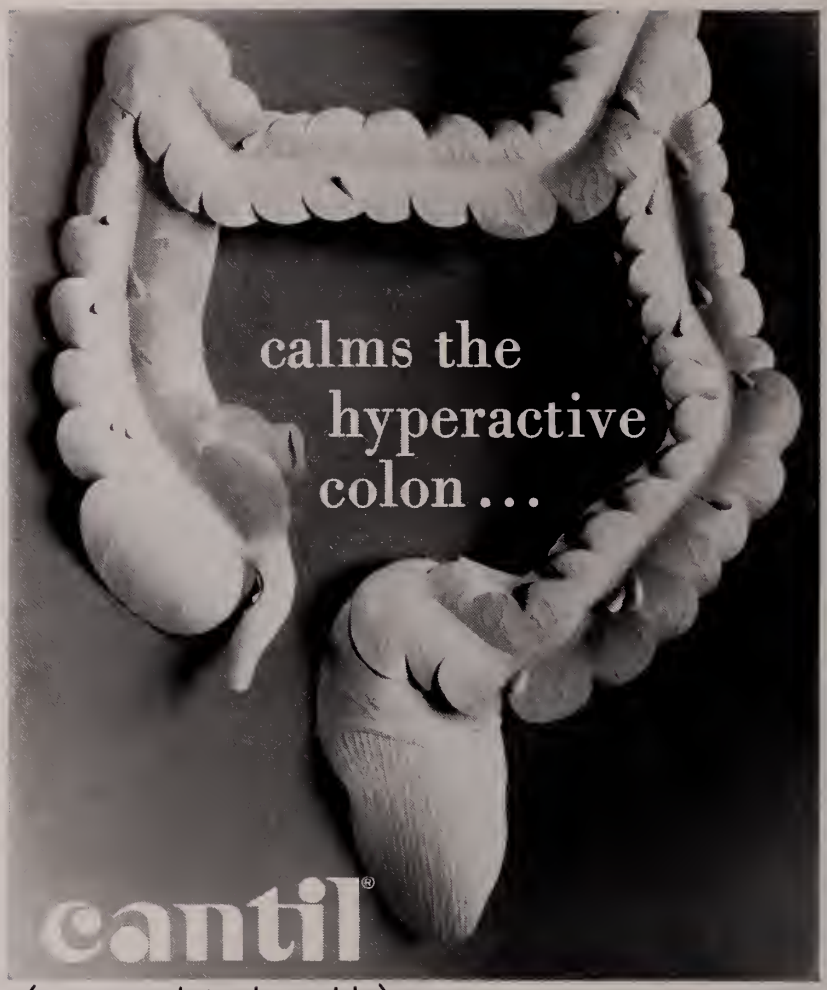

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helps restore normal motility and tone

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1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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The JOURNAL
of the Florida Medical Association

Our Heritage

A review of past editions of The Journal of the Florida Medical Association discloses that in the presidential address of Dr. Edward Jelks in 1938, the Association was reminded that from the scientific contributions of the past came medicine as we now know it. Dr. H. Marshall Taylor, President of the Association in 1923, writing for the Southern Medical Journal in 1935, reminded us that this scientific interest is the basis of achievement in other fields when he recounted the accomplishments of Dr. John Gorrie. Dr. Webster Merritt, stimulated by his great interest in our state heritage, gave us an historical background in which our state and our medical profession take great pride; his studies led to numerous articles for The Journal, one of which is reproduced on page 494 of this issue. From these efforts, and from the efforts of others, came a knowledge of our heritage and each contribution was a high spot in The Journal's history.

Since the untimely death of Dr. Merritt, there has been little effort to further the knowledge of that which is past. But now there is evidence that the quiet period in the recording of Florida's medical history is passing. The Immediate Past President of the Association, Dr. Samuel M. Day, devoted his address to the House of Delegates at the April 1965 meeting to the facts surrounding the life and times of Dr. A. S. Baldwin, in whose home the Florida Medical Association was organized. Dr. William M. Straight, of Miami, Chairman of the Committee on Archives, is doing a masterful job in the collection of historical data. Dr. Robert L. Tolle, of Orlando, is continuing his interest in the history of the Orange County Medical Society. Dr. Rowland E. Wood, of St. Petersburg, is collecting data on the practice of medicine on the Gulf Coast, and the interest of Dr. Clifford C. Snyder, of Coral Gables, is in the early period of explorers.

We are indebted to Dr. Day, Dr. Straight, Dr. Tolle, Dr. Wood and Dr. Snyder for their presentations in this historical issue. It is The Journal's wish that this be the first of many, and that every member of the Association make a permanent record so that our history can be preserved to become our heritage.

T.M.

Medical Leadership

SAMUEL M. DAY, M.D.
JACKSONVILLE

Today I am to be a teller of tales. I will relate to you the interesting story of Abel Seymour Baldwin, M.D., founder of organized medicine in Florida.

A perusal of many fine presidential addresses delivered over the years reveals that most of the Presidents of the Florida Medical Association related activities which were carried out during their administration. Many addresses were filled with platitudes and some involved downright "preaching." During my 15 years as an officer of this Association I have related innumerable accounts of our activities, I have organized and participated in numerous projects, I have recanted my share of platitudes, and I am sure you will agree I have done more than my share of "preaching." Faced with the dilemma of "repeating repetition" I searched for something different. I am grateful to my friend, Dr. Dekle Taylor, for suggesting that I look to history for a subject that might be timely as well as interesting.

On accepting this suggestion, I found it was not long before my gratitude was in evidence again. This time it was extended wholeheartedly to the late Dr. Webster Merritt for writing his two fine books, "The Duval County Medical Society 1853-1953,"[1] and "A Century of Medicine in Jacksonville and Duval County."[2] Without these volumes it would be virtually impossible for a President of the Association to prepare an historical manuscript on medical history in Florida during his busy year in office. The latter book, which unfortunately is no longer available, relates the history of our Association so well that it is not only easy but it is a pleasure to take the historical trail.

I am happy to report to you that we again have an active historian, Dr. William M. Straight, serving as our archivist and delving into the background of Florida Medicine. Let us remember that the value of an historian is not fully appreciated until his history alone remains to portray the story of the times. Let us help Dr. Straight and our other archivists in every way possible. Incidentally, our office badly needs the photograph of Dr. J. W. Hicks, of Orlando, the thirteenth President of this Association in 1887. Please become historical sleuths long enough to find us that picture. It is all we lack for a complete panel of Past Presidents.

These are fabulous times in which we live, with the Atomic Age and the Space Age. The Medical Era, however, extends through both these ages and is just as fabulous in its advances as are the miracles of atoms and space. Lest we forget, these marvelous advances were made possible by the sound foundation in facts which were laid by our forebears, men and women of integrity who worked hard under trying circumstances to improve the health, welfare and knowledge of their fellow men.

Abel Seymour Baldwin, M.D.

In reading the history of Florida Medicine one is inspired by the intelligence, the ingenuity, the versatility and the leadership exhibited by one particular Florida physician over a period of 60 years. Perhaps "The Book of Jacksonville, A History (1895)"[3] by S. Paul Brown illustrates it best in its opening biographical sketch which states:

> Perhaps the most picturesque and interesting living figure in the history of Jacksonville is Dr. A. S. Baldwin. Few persons are now living who were in Jacksonville when he came here, in 1838, at the age of twenty-seven years. Fewer still were old enough at that time to even remember, much less participate with him, in any of the stirring events of that period in which he had a conspicuous part as one of the defenders of the State, in the Seminole War, then raging. His history from the time he came here, is the history of Jacksonville, for he has been prominently identified with every movement for the development and advancement of the City from its very inception almost, and now, at the ripe age of eighty-four, he may look back with pride and pleasure to his early struggles, and view with satisfaction the evidences all around him of their results.

President's Address.
Read before the Florida Medical Association, Ninety-First Annual Meeting, Bal Harbour, April 22, 1965.

Abel Seymour Baldwin was born in Oswego County, New York, March 19, 1811, being descended from old English families of Seymour and Baldwin. Orphaned in infancy, he was adopted by an uncle and aunt in nearby Madison County where he was taught by private tutors until he attended the seminary at Cazenovia and the Polytechnique Institute at Chittenango. His plans to enter an eastern college were frustrated by the death of his uncle in 1830; so he entered Geneva, now Hobart, College. He was graduated four years later with Bachelor of Science and Bachelor of Arts degrees. He was proficient in several branches of natural science, but chose to study medicine in the office of Dr. Thomas Spencer, a professor in the medical department of his alma mater. He interrupted his medical studies after two years to accept the appointment of botanist in the geological survey of Michigan. Exposure to outdoor life in the severe climate resulted in "an acute attack of inflammatory rheumatism" which made it impossible for him to continue the work. He returned to New York, resumed his studies and in 1838 received the degrees of Master of Arts and Doctor of Medicine from Geneva College. He entered the practice of his profession in Geneva. In June of the same year he married Miss Eliza Scott, of an influential Geneva family. Owing to frequent recurrence of rheumatic attacks he decided to move to Florida, where he arrived December 2, 1838.[2-4]

Abel Seymour Baldwin, B.S., B.A., M.S., M.D., 1811-1898.

Diversity of Interests

Settling in Jacksonville, a straggling village of scarcely 1,000 inhabitants, Abel Baldwin entered upon the practice of medicine, which became at once extensive, remunerative, and very laborious. For some time he was the only physician within an area of 20 miles around Jacksonville.[5] It soon became apparent that this young doctor was studious, scientific and practical, and I may add, persistent. It has been said that had this man gone elsewhere, the history of our state, and particularly Duval County, may have been quite different. Because of his training in botany he was well versed in the life and growth of plants. He was talented in art and music, did fine carving on ivory and wood and played several musical instruments. He became an active member of the St. Johns Episcopal Church and for many years led its choir and played the viola. He was a warden of the vestry of that church for 56 years and helped in forming five other parishes from the mother church.[2-4]

Dr. Baldwin's interest in botany and physical sciences was soon manifest by his keeping of daily thermometer and weather readings, so as to make a study of the climate which had restored him to health. These were begun in 1839. He became the official meteorologist for the Smithsonian Institute and in later years his records became, in large part, the basis for studies on the climatology of Florida. As a true scientist, he waited for his data to accumulate, he drew his conclusions and he worked vigorously to disseminate the knowledge he had obtained. His presidential address before the Florida Medical Association in 1874 was entitled "The Climatology of Florida."[6] This represented the first detailed analysis of the Florida climate. Similar publications followed in the Semitropical[7,8] and other periodicals, constantly boosting the climate of Florida in a way that would make our present Chamber of Commerce proud.

Apparently word had come from other areas that the Florida climate was unhealthful, and one of the principal objections had been the excessive humidity of Florida. Dr. Baldwin went to great lengths to expound the value of humidity in main-

taining a comfortable temperature, pointing out that because of the humidity the differences in the highest and lowest temperatures recorded by him in 36 years in Florida were not so great as the diurnal differences in many places where very dry atmosphere existed. In true Chamber of Commerce fashion, the good doctor said:

> There are few extensive marshes in this state, at the sources of the rivers, on the summit, are often found savannahs. . . . This is a peculiar area in Florida and the residents around these savannahs are not especially liable to diseases of a malarial character. The large area at the lower end of the peninsula, called the Everglades, and covered by water, is by many supposed to be marshy; but such is not the fact, for it is simply a shallow lake elevated above the ocean some 10 feet or more, surrounded by a rocky rim with a sandy and rocky bottom, containing clear, fresh water, which is discharged through the fissures or apertures in the rocky rim into Key Biscayne Bay and probably through the outlets on the West Side to the Gulf.[6]

He pointed out that the numerous rivers and lakes, the surrounding ocean and gulf, modified and equalized the temperature, rendering the country around their borders peculiarly adapted to the culture of oranges and other tropical fruits, while at the same time the residents in general enjoyed good health both summer and winter. He published mean temperatures and the rainfall from 24 stations scattered over Florida. It may be said that the good doctor was one of the first tourist and immigration promoters for Florida. As a result of his publications people began to come to Florida for their health and they returned home to spread the word far and wide. One of Dr. Baldwin's addresses on climatology brought condemnation from the editor of the Philadelphia Medical and Surgical Reporter, who stated that it was a "bid for the invalid."[9] He particularly resented the statement that Florida had a special exemption from atmospheric commotion. The editor stated:

> Evidently our southern friend thinks that pure air is only served up in Florida, and the same of water. The productions of the soil are so varied as to please or respond to the palatial caprices of all. The author detects nothing unfavorable about his state, but a few habits that are unfashionable. Our 'patent medicine' vendor and his wares levy too much on the purses of his neighbors. The error of the pamphlet is the unmitigated conceit of the writer about the advantages of his home.

It is significant that the Semitropical defended Dr. Baldwin in this manner:

> Dr. Baldwin is perhaps as far from the characteristics ascribed to him as any man alive. . . . His address is based upon careful scientific investigation and the observation and experience of thirty years. . . . He does not vaunt mere opinion but gives the elements and facts from which an intelligent and dispassionate mind may arrive at definite and reliable conclusions.

Manifesting this interest further, Dr. Baldwin was active in the organization of the Florida International Chamber of Commerce and Mississippi Valley Society. In 1877, as secretary of the organization, he read an essay, "on transportation through the interior of the peninsular portion of the state, showing its inseparable connection with the proper system or plan of drainage and the reclamation of various tracts of submerged or overflowed lands in the southern portion of the peninsula, and that by such a system, properly planned and executed, both reclamation of various areas of the most fertile land in the state and cheap and convenient avenues of transportation through the interior could be effected." He was an indefatigable worker for a ship canal through Florida and for reclamation drainage projects in the interior of our state.[10,11]

Scourges of the Times

Abel Baldwin lived during an active medical period. Ephraim McDowell had already performed his surgical feats. Pasteur, Lister, Long and others were contemporaries,[12] but news of their feats was slow to travel and acceptance of their conclusions was even slower. Successful therapy of malaria with quinine was proposed by another Floridian, Dr. Henry Perrine,[13] prior to Baldwin's early days in Florida, but malaria was still a problem. Yellow fever and smallpox were scourges that came in epidemics and caused great morbidity and mortality. In 1853 and 1854, scarlet fever and smallpox epidemics and a disastrous fire struck Jacksonville. Dr. Baldwin survived two epidemics of yellow fever in 1857 and 1888. He lost his wife Eliza in the 1857 epidemic and his only son, Dr. William L. Baldwin, age 49, in the epidemic of 1888.[3,4,14]

In 1877, Fernandina experienced a severe yellow fever epidemic. Since the cause of the disease was not known, the most satisfactory treatment for yellow fever consisted of good nursing and sanitary conditions. During the yellow fever epidemic in Fernandina in 1877, Jacksonville was accused of having unhealthy conditions and covering up its mortality figures. In August, Dr. Baldwin, as chairman of the health committee of the Jacksonville Board of Health, wrote to Dr. R. P. Daniel, then president of the Duval County Medical Society, denying unhealthy conditions existed in Jacksonville.[2] He directed attention to the excellent mortality statistics and asked that physicians knowing of facts to the contrary notify

him. This action helped to calm the fears that existed at that time.

In 1883, much confusion existed because of a smallpox epidemic and the bad conditions of the pesthouse.[2] It was impossible to determine who had been vaccinated. Funds were not sufficient to improve conditions. Again Dr. Baldwin took the leadership on April 25, 1883, at the age of 72 years. He spearheaded a combined meeting of the Duval County Medical Society and the Jacksonville Board of Health, recommended compulsory vaccination for everyone, vaccinated or unvaccinated, and volunteered services, free of charge, by members of the Duval County Medical Society in carrying out the vaccinations. These recommendations were passed by the society. This action activated the Board of County Commissioners; the pesthouse was cleared and the use of the Duval County Hospital and Asylum was assured for the care of suspected smallpox patients.

After the discovery of the ice machine by Dr. John Gorrie,[15] another Floridian, physicians were groping for methods for preventing the spread of and for treating yellow fever. The concussion theory of Colonel Hardee proved ineffectual. The burning of tar and pitch flares at night were used extensively and may have been somewhat helpful by driving away mosquitoes. Dr. Baldwin proposed a method for "disinfecting exposed ships." He reasoned that the United States Government had in some instances sent infected vessels far northward so that disinfection was produced by the extreme cold. And the ending of epidemics with the first frost of the winter in the South caused him to conclude that, if germs there be, they were produced in hot climates and killed in cold. He, therefore, proposed an elaborate system of flexible pipes to be used on vessels at quarantine stations, to bring the temperature down several degrees below freezing inside the holds of the ships and keep it there for a time sufficient to destroy the germs of the disease.[16] No records indicate that this recommendation received recognition other than its publication.

The Baldwin Operation

Another of Dr. Baldwin's clinical proposals was more successful. In 1848, he carried out what was at least new to him in the treatment of intussusception of the bowel.[4] It consisted of distending the lower bowel by tepid water administered gradually and persistently by pump, until the invaginated portion was drawn out, and the bowel put in condition for free discharge. Dr. Baldwin related:

> The patient on which it was first tried happened to be present during my treatment of a case which terminated fatally, was also present at the postmortem examination, which showed me that if I had adopted this plan, in that case, the result might have been different. Being then called to this patient, and using the ordinary remedy for a day or so, I proposed to him this change of treatment, the operation to which I alluded, to which he consented, provided time to make his will in advance. This being accomplished, we proceeded at once to the injection of tepid water, which was carried until the abdomen was largely distended, pressure being made at the same time to prevent regurgitation. This plan was perfectly successful in this instance, and has been subsequently in every instance since, when tried and used sufficiently early in the complaint. This operation was adopted by my fellow physicians, who have named it the Baldwin operation since 1848."

A letter giving an account of this operation was published in the Medical Journal of Philadelphia edited by Hayes. Although Dr. Baldwin's name has long since been forgotten in relation to this procedure, it is essentially an accepted practice in the treatment of intussusception today and it is only in the last few decades that it has been revived and brought to popular use.

St. Johns Bar Project

During his professional visits up and down the St. Johns River, Dr. Baldwin observed the tides and currents which existed at its mouth where the St. Johns River and the Fort George Inlet entered the ocean only a short distance from each other.[3,17] Dr. Baldwin spent considerable time studying these tides and formed strong opinions as to their causes. His original treatise on the subject, published in June 1876 and entitled "The St. Johns Bar," presents interesting and informative material. His knowledge of nature, of the hydraulic laws of rivers, tides, and currents, caused him to propose closure of the Fort George Inlet as the means of insuring an adequate channel for the St. Johns River. It was his opinion that as long as the crosscurrents existed between these streams, the shifting sands resulting from them were completely unpredictable and that Jacksonville could not be developed as a deep water port and the St. Johns River could not be adequately utilized.

Dr. Baldwin went to the citizens with his request at a public meeting. He was sent to Washington in 1853 to request appropriation of funds to carry out his proposal. The engineers of the Topographical Bureau accepted his proposals and he was successful in receiving two appropriations of $10,000 each from the Congress. Unfortunately for him, the Army Engineers and

not those of the Bureau were assigned to do the job. The Army Engineers did not accept the doctor's proposal and did considerable study of the problem, thereby spending the $10,000 appropriation, much to Dr. Baldwin's disgust. The other $10,000 was spent in similar manner over the doctor's protest. He was vehement in his condemnation of the Engineers who refused to try his recommendations, but suggested instead that a channel be dredged through the sand at the mouth of the river. Dr. Baldwin told them in no uncertain terms that the channel would be filled with sand by the time they completed the activity, and he recommended that appropriations be paid only for successful results, but an appropriation of $25,000 was spent in dredging the channel. Dr. Baldwin's predictions were accurate in that no satisfactory channel existed by the time the dredging was completed.

Still, the Engineers refused to accept his recommendation of closing the Fort George Inlet. One of the Engineers, Lieutenant Wright, recommended a pier on the north bank of the river, but it was considered too expensive. Faced with this stalemate for a quarter of a century, Dr. Baldwin in 1878 consulted Captain Eads of New Orleans, who had built the jetties at the mouth of the Mississippi River which cleared the New Orleans channel, after much bickering with the Army Engineers. Baldwin did not think jetties were the best answer to the St. Johns Bar problem, but he was desperate for improvement of Jacksonville's port. The Captain studied the St. Johns Bar and made recommendations for the system of jetties that now exists. The Engineers agreed with the plan. Dr. Baldwin returned to Washington in 1880 and succeeded in getting a Congressional appropriation of $125,000 to begin the work, which was continued steadily over a period of many years until completed. It is interesting to contemplate whether the simple proposal, closure of the Fort George Inlet, would have succeeded in permitting the St. Johns River to maintain its own channel and whether closure of the Inlet coupled with construction of the jetties would have prevented the severe erosion of the beaches as was indirectly suggested by Dr. Baldwin.

Railroad President

In 1852 while on his St. Johns Bar mission to Washington, Dr. Baldwin was elected to represent Duval County in the state legislature.[2,4] From Tallahassee on January 21, 1853, he wrote a letter to the Editor of the Florida Journal, championing the Florida Atlantic and Gulf Central Railroad. In so doing, he took issue with Governor Call, who had appealed to the citizens of middle Florida to unite in promoting the construction of a railroad to connect the St. Marks and Brunswick roads. Dr. Baldwin was convinced that this route would shunt the trade of the state into Georgia. During his first term in the legislature he succeeded in securing a charter for the Florida Atlantic and Gulf Central Railroad for a road right-of-way from Jacksonville to Pensacola. He organized a company to finance the construction of a railroad through the selling of bonds. He was elected president of the directors of the company in November 1853. In 1857 ground was broken for the road from Jacksonville to Alligator (Lake City), but the yellow fever epidemic in Jacksonville interfered with the work, and there was further delay. The railroad finally reached its destination on March 13, 1860.* In the meantime the town had changed its name to Lake City. Once the construction was completed, Dr. Baldwin resigned as president of the railroad.

Duval County Medical Society Founded[1,2]

In response to a call issued by Dr. Baldwin, six Duval County physicians met in the office of Dr. William J. L'Engle, on May 25, 1853, and organized the Duval County Medical Society, the first and only county medical society in Florida for two decades. This organization was born in the Republican Building on Bay Street on the southwest corner of Market, which is now the site of the Jacksonville City Hall, where there is a plaque commemorating the founding of organized medicine in Florida. Merritt stated that Dr. John S. Murdock was elected the first president of the Duval County Medical Society. All available information indicates that Dr. Baldwin was the leader of the group and was responsible for the founding and organization of the society. It is somewhat confusing that Dr. Baldwin's obituary, written by a committee of the Florida Medical Association of which Dr. R. P. Daniel,[18] the first treasurer of the Duval County Medical Society and half-brother of Dr. Murdock was chairman, stated that Dr. Baldwin was not only first president of the Florida Medical Association, but was also first president of the Duval County Medical Society. I was unable to verify this statement.

Abel Baldwin was president of the Duval County Medical Society in 1865 when the eight

*Presently part of the Seaboard Airline Railway.

Home of A. S. Baldwin at Laura and Adams Streets. Site of founding of the Florida Medical Association in 1874.

physicians who were practicing in Jacksonville found times hard and collections difficult. They repeatedly published in the newspaper a resolution to the effect that they were "willing to do the work of charity and administer to the truly indigent but they were not willing to treat those persons who were able yet too lazy and dishonorable to make an effort to pay their physicians." Apparently they reported delinquents at society meetings and applied group pressure to see that those who could pay did pay.

In 1860, the town of Thigpen in Duval County was dissatisfied because of the many jokes associated with its name. Pleased with the building of a railroad through their locality, the citizens of the community changed the name of the town to Baldwin, which it carries today.[19]

Dr. Baldwin was elected to a second term in the legislature, during which session he fathered a bill creating a temporary internal improvement board, of which he became the member from his district.[3] The object of this board was to assist in the building of railroads in the state of Florida. This they did by donating alternate sections of land along the proposed route of the road and endorsing the company's bonds for ironing. This board was afterward made permanent and consisted of the Governor and his Cabinet.

The War Years

From the lower House, Dr. Baldwin was promoted by his fellow citizens to the State Senate in 1858.[3] Again the election took place while he was out of the city. He was a member of that body when the war broke out. He strenuously opposed secession. Although he was a native of New York and had many friends and relatives in the North, (a cousin, Governor Seymour,[10] was the democratic nominee for President of the United States in 1868), his loyalty was to his adopted land and he was one of the first to volunteer his services at the secession of the State of Florida, January 10, 1861. He was appointed chief surgeon for East Florida.[2,4] As early as September 15, 1862, a large group publicly thanked him for his efforts at the General Hospital in Lake City. In February 1865, he became medical director of the General Hospitals of Florida and Quitman, Georgia. His Army letter case and account books are preserved in the Confederate Museum at Richmond, Virginia.[2]

He returned to Jacksonville when the war was over and found that his property had been confiscated.[2,3] After a few years and an extensive fire he recovered his land possessions. Shortly thereafter he erected an extensive group of buildings on West Bay Street known as the Palmetto Block, which housed 14 stores and many offices. In 1866, Dr. Baldwin was married again, this time to Mrs. Mary E. Dell.[3] They had one daughter, Edna Seymour, who married Samuel P. Holmes and whose descendants live in Jacksonville today.*

Florida Medical Association Organized

In November 1873, Dr. Baldwin issued a call to doctors in Florida for a meeting to be held in

*A great grandson, Rogers Baldwin Holmes, is the son-in-law of Dr. Kenneth A. Morris of Jacksonville.

Jacksonville on January 14, 1874.[2,3,20] Ten physicians from six counties met in the office of Dr. Baldwin at Laura and Adams streets. On his motion, an organization was effected entitled the Medical Association of the State of Florida. The constitution and by-laws of Georgia were adopted until suitable substitutions could be provided at the next annual meeting. Dr. Baldwin was elected unanimously the first President.[21] He was one of the four members who prepared the constitution and by-laws for the next meeting.

At the second meeting of the Medical Association of Florida, on February 17-18, 1875, Dr. Baldwin made his enlightening address on "The Climatology of Florida," which has been referred to previously.[6,7] He was re-elected President of the Association, one of three physicians to have held the honor for two terms. At the third meeting of our Association he was appointed a delegate to the American Medical Association convention in Philadelphia.[22] Dr. T. M. Palmer was elected President and alternate delegate to the AMA. Because of Dr. Baldwin's outstanding leadership, our Association began on a firm foundation and has functioned without interruption since that time.

Although Dr. John P. Wall of Tampa was the first to champion actively a Board of Health and Dr. R. P. Daniel of Jacksonville took up the fight and became the first chairman of the Board of Health, Dr. Baldwin was one of the leaders in persuading the state legislature to establish this Board. In his forthright way, he pointed out that the only reason the Board had not been established was the legislature's refusal to appropriate the $2,500 necessary for its implementation. The yellow fever epidemic in Jacksonville in 1888 aroused the public interest to the point that Governor Fleming called a special session of the legislature which established the State Board of Health.

Dr. Baldwin was not always successful in his efforts, as indicated by his difficulty in raising money from doctors. Dr. E. P. Wellford, President of the Florida Medical Association in 1878, died while in office.[2] The society resolved to erect a suitable memorial and a scholarship to medical schools in his honor. Dr. Baldwin was chosen chairman of a special committee to raise the funds and choose the memorial. He reported in 1879 that because of inability to raise the funds, the memorial was dropped, which was the only record of surrender found in material relating to this energetic physician.

Community Activities

At a time when few men of his age were alive, Dr. Baldwin apparently retired from the practice of medicine, but continued his varied activities for the betterment of his community and his state. A Board of Trade was founded in Jacksonville in 1866.[4] Dr. Baldwin was a member of the Board. It was during action on this Board that he vigorously promoted improvement of the St. Johns Bar. Apparently, the Board of Trade was reorganized in February 1884, and again Dr. Baldwin was an active participant. In fact, in 1895, at the age of 85 years, he became the seventh president of the Jacksonville Board of Trade.* His activities on the Board of Trade brought about adoption of a standard time, lowering of telegraph rates and lowering of railroad rates, as well as deepening of and increased shipping on the St. Johns River.

In December 1877, Dr. Baldwin reported on the drainage and sewage in Jacksonville, directing attention to the "pond," a swamp in the middle of present Jacksonville, which was in the same condition as when the yellow fever epidemic began in 1857.[2] He recommended draining the pond and he criticized several other areas as being unsanitary and in need of drastic action. Much public debate was offered on the issue and on January 15, 1878, a bond issue for $250,000 was passed in the community by a vote of 625 to 159, which would finance necessary improvements. This was the second bond issue voted by the city, the first having been for $50,000 in 1857 to help build the railroad. Dr. Baldwin was made chairman of the Sanitary Board Bond Trustees. Without waiting for bonds to be issued, work began on the draining of the pond and was completed by April 1878. A large reservoir was constructed north of Adams Street at Clay and Cedar, for flushing the sewer. It became known as Dr. Baldwin's fish pond. It was surrounded by trees and shrubbery and Dr. Baldwin enjoyed many pleasant hours lounging there during his later years.

In addition Dr. Baldwin succeeded in draining and filling certain lowlands in the city of Jacksonville, improving Hogan's and McCoy's creeks, erecting the Water Works at a cost of $130,000 and constructing an effective sewage system, as well as a cremator for the consumption of garbage. The last bonds were repaid in 1894, at which time it was said, "The Trustees of the Sanitary Improvement Fund have acquitted themselves of a great responsibility, in a manner most creditable

*The name of Board of Trade was changed to Chamber of Commerce on January 6, 1915.

to themselves and beneficial to the community. So perfectly does the system (sewage) work that it is next to impossible for disease to gain a foothold, having no impurities to feed upon." Perhaps this statement is overly optimistic, but we can see that the community was well satisfied with the job performed by our doctor, with his never ending gratuitous services.

He was likewise interested in the beauty of his home community. The magnificent oak trees that made Jacksonville famous in his declining years were a tribute to his foresight when in 1850, nearly half a century before, he joined General Thomas Ledwith to supervise their planting.[4,23] Unfortunately, they survived him but a short time, for nearly all of them were destroyed by the disastrous fire of 1901.

Life in Florida was apparently difficult for many years following the Civil War, with accusations and counteraccusations regarding civil rights, anarchy, and similar activities. As chairman of the Florida Fruit Growers Association in April 1877, Dr. Baldwin succeeded in gaining the unanimous adoption of a resolution regretting to learn of statements derogatory to Florida in newspapers in the North and West, "representing that Florida people are in a state of anarchy rendering it unsafe for strangers to either visit or become permanent residents of the state." His resolution emphatically denied these statements and declared that Floridians were as quiet and as law-abiding people as any to be found in the Union.[24]

Dr. Baldwin was a member of the American Scientific Association of Montreal, was a corresponding member of the Boston Natural History Society, and was a frequent correspondent of Agassiz on scientific subjects and natural history for six decades.[6]

For six decades almost to a day, Dr. Baldwin led the vanguard of the public in Jacksonville, Florida. At the time of his death on December 8, 1898, in his eighty-eighth year, he was the city's most distinguished citizen. The report[18] of the Committee on Necrology of the Florida Medical Association in 1899 stated:

> Identifying himself thoroughly with the city and state of his adoption, he was ever ready to assist actively in whatever promised to promote the welfare of his fellow citizens; original, progressive, and unselfish, he was not only a distinguished member of our profession, but a most estimable and valuable citizen. The medical profession in Florida owes much to Dr. Baldwin as a pioneer in its path of usefulness and influence. . .
>
> Such a life record as that made by our departed fellow member and fellow citizen is as admirable as it is rare, and the contemplation of which should stimulate us to emulate the virtues of usefulness which might make our memories honored and revered by our fellowmen when the Master calls us hence.

A Noble Heritage

My tale is told. You have heard the story of this remarkable leader of men. If we think our problems are tough today, if we feel discouraged when we fail to win a few rounds with advocates of political medicine, if we, for even a moment, question the reasons for trying to uphold the principles for which we have been fighting, then let us put ourselves in Dr. Baldwin's shoes—better still, put him in our shoes—and try to think what he might do. His demonstration of fighting for what he thought was right regardless of the odds tells us we cannot let down. His eagerness to better the lot of his community, his state and his fellow man should make us vigilant and progressive, not only in health fields but in related scientific activities and other pursuits that may benefit our state and our country.

As are most physicians, Dr. Baldwin was an individualist, but he was an individualist who saw the need for group action. Only six years after the founding of the American Medical Association, he organized his county medical society; and he did not stop there. Nineteen years later he fulfilled a wider need when he organized the Florida Medical Association.

We, as leaders of Florida medicine, must use the group voice with a cooperative attitude in the things that are best for our patients. We hold the solutions to health problems in our hands, and if we will stick together as a profession we can solve them. Let us be honest in our evaluation of all new programs and their effects on our patients. We must continue to see that people get the medical care they need at a price that they can afford to pay. Let us carefully consider every angle. Someone pays, even when government takes over. If we negotiate with the government for the care of the aged who are covered under recently approved programs, we will do well to direct our committees to remember experiences that have been accumulating without a fee schedule, having the doctor charge his reasonable and customary fee.

Since long before the time of Dr. Baldwin, doctors have been noted for giving their services in the care of the needy sick. As recently as February 1965 we indicated overwhelmingly that we wished to continue to do so under the Kerr-Mills program in Florida as it existed at that time. Events have changed our situation, however. We

now are faced with a program which assures medical services to some people at a price which is likely to be fixed by government. Actually we are the only ones who can bargain for our services, and although our humanitarian attitude may have been most exemplary through the years, we have been brought face to face with the hard facts of life, those of selfish politics.

A great many fields of endeavor owe their existence to government payments, government contracts, et cetera. Each year we learn of fortunes which are made by deals with government; yet we, in medicine, have remained starry-eyed, giving government a service and giving indigent patients medical care which will be very costly for government to buy. We must not only do our part in caring for the people but also see that government does its share, paying a fair price for patient care with patients' needs as the foremost consideration, rather than bureaucracy building with its inevitable dictatorship. Let us not relax —let us fight with renewed effort.

I am thankful for Abel Baldwin who brought organization to medicine in Florida, and I thank you active members of Florida medicine for the opportunity to serve this organization through these 15 years. It has been a rewarding experience in many ways. Belatedly, I would like to express my appreciation to Harold Parham, our superb Executive Director, and to the staff at the Florida Medical Association headquarters, without whom I could have accomplished little. I could name many doctors who have been my right arm, but time does not permit. You who are active know who they are. They are the backbone of our group. They are you, and you and you. There have been many headaches and heartaches, and also joy and happiness. My best wishes go to Dr. Hampton, my successor. I pledge him my and your loyal support, and we wish him well.

In one last look at the history of our organization I found that we have had night and day in our leadership. Dr. A. W. Knight was Secretary-Treasurer of the Florida Medical Association for seven years until his death in 1889. Sixty years later a Day followed the Knight and now the Day draws to a close. This Day is done until maybe someday one or more of my sons may bring Daytime again. Thank you.

Bibliography

1. Webster Merritt, M.D., "Duval County Medical Society 1853-1953," February, 1954.
2. Webster Merritt, M.D., "A Century of Medicine in Jacksonville and Duval County," 1949.
3. S. Paul Brown, "The Book of Jacksonville" (Poughkeepsie, N.Y., 1895), pp. 148-51.
4. Physicians and Surgeons of America, "Biographical Sketch of Dr. A. Seymour Baldwin."
5. T. Frederick Davis, "History of Jacksonville, Florida and Vicinity," p. 95.
6. Proceedings of the Florida Medical Association, "An Address on the Climatology of Florida" by A. S. Baldwin, M.D., President, February 18, 1875.
7. A. S. Baldwin, M.D., "Climatology of Florida," The Semi-Tropical, October, 1875.
8. A. S. Baldwin, M.D., "Climate in Its Relation to Medicine —Preventive and Remedial," The Semi-Tropical, February, 1876, pp. 65-78.
9. The Semi-Tropical, "Literary Notes," May, 1876, p. 320.
10. Rowland H. Rerick, "Memoirs of Florida," Vol. II, Atlanta, Georgia, The Southern Historical Association, 1902, pp. 156-7.
11. The Semi-Tropical, "Internal Improvement," September, 1875, p. 5.
12. Allen O. Whipple, M.D., "The Evolution of Surgery in the United States," 1963, pp. 12-30.
13. Edward Jelks, M.D., "Dr. Henry Perrine," Journal of the Florida Medical Association, XX (April, 1934), pp. 459-63.
14. Proceedings of the Florida Medical Association, "Resolution," 1889.
15. Edward Jelks, M.D., "Doctor John Gorrie, Inventor of the First Artificial Ice Machine," Annals of Medical History.
16. A. S. Baldwin, M.D., "Artificial Disinfection," Proceedings of the Florida Medical Association, 1877.
17. A. S. Baldwin, M.D., "St. John's Bar," The Semi-Tropical, II (June, 1876).
18. Transactions of the Florida Medical Association, Report of Committee on Necrology, pp. 37-39, 1899.
19. Florida Times-Union, "Gallery of Florida Towns," June, 1962.
20. Proceedings of the Florida Medical Association, January 14, 1874, pp. 3-5.
21. Proceedings of the Florida Medical Association, February 18, 1875.
22. Proceedings of the Florida Medical Association, January 18, 1876, pp. 5-7.
23. Pleasant Daniel Gold, "History of Duval County Florida," (St. Augustine, Florida: The Record Company, 1928), p. 115.
24. The Semi-Tropical, "Law and Order Vs. Anarchy and Violence," April, 1877, p. 220.
25. Medical Legislature Digest, "Medicare-1965," April 15, 1965, 89th Congress, Vol. IV, No. 2.

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Editor's Note: This presidential address by Dr. Day is a part of the official proceedings of the Annual Meeting of the Florida Medical Association, held April 22-25, 1965. A transcript of the proceedings was published in the June issue of The Journal. Because of the historical significance of Dr. Day's address, he graciously consented for it to appear in this issue.

History of the Orange County Medical Society

ROBERT L. TOLLE, M.D.
ORLANDO

Medicine in Central Florida dates back beyond any available records. On October 22, 1925, the Sentinel reported, "Honor was done last evening to one of Orlando's best loved citizens, Dr. W. C. Person who recently passed his 80th birthday." In addition to tributes by colleagues and son-in-law Judge Wilbur Tilden, old time friends, N. P. Yowell and W. R. O'Neal spoke of his tribulations at the time (1875) when he started practice in Orlando. Of interest is the fact that Dr. Person was present when "just for the hell of it" Confederate General Forrest snitched the trousers of a sleeping Yankee General from his own tent.

Dr. Person met with Drs. C. D. Christ, Washington Kilmer, Sylvan McElroy, J. S. McEwan, George Porter and J. D. Rush of Orlando and Drs. Jerome Bruce, N. DeVere Howard and W. S. King of Sanford to form the Orange County Medical Society (including Seminole County). The host, Dr. McEwan, the last survivor, died in 1957.

Dr. Rush was the first President. After elections and the adoption of a constitution and by-laws, "refreshments were served." "Old General Packingham" was a regular attendant at the post-meeting gatherings at the Elks Club where "refreshments and social intercourse were enjoyed."

Dr. Robert J. Bigelow of Ocoee was elected to membership at the second meeting on June 24, 1908. At this meeting the first business transaction recorded was the order to pay $1.90 for sundries, etc.

In December 1908, Dr. McEwan was the first delegate to a meeting of the Florida Medical Association. He attended in lieu of Dr. Rush, who was unable to be present.

During the first year, three members were added and one dropped for nonpayment of dues. After 25 years the membership was 49, at 50 years 224, and currently (February 1965) 347.

Some of the program topics indicate changes in disease importance during the years. These included Dengue, Eclampsia, Pellagra, Typhoid, Smallpox, Leprosy, Syphilis, Surgery for Aneurysm, Infantile Paralysis and Bubonic Plague in the years from 1908 to 1920.

Medical economics received its share of attention, both from members and experts. Examples from a minimum fee schedule passed in 1909 are: Consultation, $10-25; obstetrical care, simple, $25-100; amputation of tonsils, $25-100; D&C, $25-100; hysterectomy, $100-500; laparotomy, including nephrotomy or nephrectomy, $100-500; house visits in the city (day), $2-5, (10 p.m. to 6 a.m.), $3-10; advice or prescription at office, $1-10.

Dr. Gaston H. Edwards joined the Society in December 1909 and served as the Secretary from 1911 through 1923. He was one of the "work horses" of the Society until his untimely death on December 29, 1934. He, Dr. Christ and Dr. McElroy arranged for the first banquet, held on January 26, 1910 at the San Juan Hotel in Orlando. As reported, "a very substantial supper was served, followed by an abundance of liquid refreshments which induced an abundant flow of wit and humor." The total bill was $29.20, including food and drink. Reference to the 1917 banquet states, "The event was quite successful in that dull care and gloom were forced from the room by the continous effervescing of gas, both carbonic and plain hot air, not to mention various tunes which were always an incident of these occasions." Following the 1918 banquet, Dr. Edwards wrote, "The Secretary vaguely recalls having spent 'somewhere' a very pleasant evening." At some of the later banquets, professional entertainment was obtained. One floor show "uncovered all phases of physical fitness." Unofficial reports suggest one of the hired entertainers added an impromptu table-top dance attired only in her shoes.

The first recorded convention of the Florida Medical Association was held in Orlando in 1914. The Secretary was instructed to try to raise $25.00 per member to defray the expenses, including the engagement of the Elks Hall with extra chairs and fans, use of the pool tables and supply of beer, whiskey, cigars and cigarettes. A ride and basket picnic were provided for the wives. The total expenses were $303.89.

During World War I years, Drs. McEwan, Edwards, Beardall, Pillans, Neal, Stevens and Chiles served in various capacities with the Armed Forces. Meetings were suspended during late

1918 and early 1919 because of the influenza epidemic.

This area has furnished many leaders, both civic and medical, including the thirteenth president of the Florida Medical Association, Dr. J. W. Hicks. Other presidents of the state society include Drs. J. S. McEwan, Gaston H. Edwards, W. Henry Spires, Gilbert S. Ossincup, Duncan T. McEwan and Robert Zellner. Dr. Louis M. Orr was Florida's first president of the American Medical Association.

Too numerous to detail in the allocated space are the many posts filled and services rendered by the members of the Orange County Medical Society. Dr. C. J. Collins served many years on the Florida State Board of Health; Drs. Horace Day, Frank Gray and Courtlandt Berry on the State Board of Medical Examiners; Meredith Mallory, delegate to the American Medical Association; Dean Steward, President, Blue Shield of Florida (his wife, President, Woman's Auxiliary to the Florida Medical Association); George Edwards, President, Florida Academy of General Practice; Miles Thomley, President, FLAMPAC; to some extent the author; Louis Murray, Board of Regents, State Universities; Rocher Chappell, State Defense and Disaster; Eugene Jewett, Jake Rozier, David Ohlwiler, and others, Foreign Medical Care. Those listed served in many other capacities, as is usual with busy people.

Dr. Don Robertson promoted, among other things, the Bulletin of the Orange County Medical Society. Other local services include medical forums; radio and television programs; yearly Fair exhibit; Central Florida Medical meetings; emergency medical service; meetings with local press and broadcasting media, lawyers, pharmacists and others. The Central Florida Medical Meeting, which costs the Society about $1,000.00 a year, and other expenses, raised the $1.90 first expense to a current budget of about $20,000.00.

In addition to the Committees for the mentioned services, members profit from the kit and talk with the Indoctrination Committee, Grievance Committee and Board of Censors. The first, in addition to the outlining of benefits of membership, tries to prevent "toe stubbing," and having to appear before the latter Committees. The Society maintains high ethical standards. One member was seen by the Board of Censors because of the number of grievances (he had three times as many as anyone else). He later was one of the three expelled at various times for "unethical conduct."

The first hospital, The Episcopal Church Home and Hospital, a cottage type establishment of less than 20 beds in operation before this century, is replaced by six institutions with about 1,400 beds currently. Present construction and definitely committed plans call for about 500 beds. The largest, Orange Memorial Hospital, will provide over 800 beds.

Although the "feuding" between the followers of two founding members may have served a useful purpose, even though the "pot shots" taken at each other occasionally spilled over to lack of harmony between the press and medicine, our present cooperative efforts seem more productive and less nerve-racking. As expressed by Dr. Mallory at the November 1950 meeting, "We are living in a changing world. . . . You must be careful that the leaders you select are thinking primarily of your problems and the community problems, not of their own."

1504 South Orange Avenue.

The Frontier Physician of Dade County

WILLIAM M. STRAIGHT, M.D.
MIAMI

If a physician were to survive in the Biscayne Bay settlement called Miami in 1874, he had to "become a Koonty digger or else sell whiskey to the Indians and get their trade as Brickel has."[1] Dick Potter, Dade County's first physician, learned this soon after he staked out his homestead and built a cabin on the site of the present residence at 8500 N. E. Tenth Avenue.[2]

It was on a January day in 1874 that Dr. Richard B. Potter and his brother, George, arrived at the mouth of the Miami River aboard the Governor Gleason, the twice monthly cutter from Key West. As they stood on the deck, they could see off the port bow a neat frame house and store building surrounded by terraced gardens. This, the captain identified as the residence and store of an Englishman, William B. Brickell. Off the starboard bow and a few hundred yards upstream they could see a row of weathered and crumbling stone houses, the remains of Fort Dallas, a military outpost of the Seminole Indian War. Only the headquarters building and officers' quarters were kept in repair; they served as the residence of the caretaker of the "Fort Dallas Estate." A thick jungle or hammock, as the captain called it, had reclaimed most of the nearby grove and parade ground.

At its mouth the Miami River was about 80 yards wide and eight or nine feet deep; the sunlight reflecting from its white sand bottom made the water sparkle. The river stretched ahead of the cutter in a gentle curve between mangrove-clad banks, the haunt of herons, bitterns and the sluggish alligator. The warm sunshine and blue, almost cloudless, sky were in sharp contrast to the sullen overcast sky that had presided over their departure from Cincinnati several weeks before. They had, indeed, found a tropical paradise. The only thing that tempered their enthusiasm for this lovely spot was the myriad of insects that descended upon them as the shore growth choked off the brisk bay breeze.[3]

Just turned 29, Potter was of medium height, slender build, and had a full head of blond hair and a neatly trimmed mustache. Always neat of dress but never vain, he wore blue denim trousers, homemade work shirts and heavy brogans. In later years, when civilization had caught up with this end of the state, he wore suits, starched shirts, bow ties and dress shoes. One of his few luxuries was his pipe; many entries in his ledger record the purchase of tobacco. He was quiet of temperament, reserved and inclined to trust his fellow man. He seemed to get his greatest pleasure in serving his neighbors, and took, perhaps, too little interest in the accumulation of money. His generosity certainly seemed excessive to his hard-pressed family back in Cincinnati who supported his outpost during its early years. Often in her letters his mother chided him about giving his medical services free and letting people eat at his table without paying.

Richard Bulckley Potter was of hardy New England stock. He was born in Groton, Mass., Jan. 15, 1845, the first child of Luther Fitch and Lydia Ames Potter. There were three other children in the family: George Wells Potter, Ellen Potter, and an adopted brother, Bernard Muller, who was also known as Ben Miller Potter and Bernard Miller Potter. Shortly before the outbreak of the War Between the States Mr. Potter moved his family to the thriving western town of Cincinnati, where he became a machinery merchant and agent for the New England Mutual Life Insurance Company.

Richard completed his preparatory education at the age of 16 and enrolled for "a partial course" at Antioch College, Yellow Springs, Ohio, for the years 1861 to 1863. College life was quite different in those days from that of today. His room in South Hall was furnished with a stove and bedstead, and he was expected to bring his own mattress, rug, and any other items of furniture he might wish. For these sumptuous quarters he paid two dollars each semester. Board cost one dollar per week; firewood cost a dollar and 75 cents a cord; there was a 10 dollar tuition fee; and he had to pay two dollars and a half for incidentals including the use of the "carefully selected" 4,000 volume library.[4]

Potter must have used his time well for in 1863 he was admitted to the Medical College of Ohio in Cincinnati, the finest institution of its

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kind in the West of that day. This school, founded by Daniel Drake in 1819, later became the medical school of the University of Cincinnati. In Potter's day it was blessed with a young, vigorous, and capable faculty. There was the professor of surgery, George Curtis Blackman, by far the most brilliant surgeon in the West. An extensive reader, a prolific writer, and a spellbinding lecturer, he was at his best in a difficult operation before a gallery filled with students.[5] Cornelius G. Comegys, the professor of the Institutes of Medicine and Clinical Medicine, was widely known for his ability as a bedside teacher.[6] Marmaduke Burr Wright, the professor of Obstetrics and Diseases of Women, was an advocate and successful practicer of that difficult and dangerous procedure, cephalic version.[5]

Money being scarce in those days, Potter lived at home. It is doubtful, however, that he completely escaped being painted with the same tar brush that the townspeople used on his fellow students. Medical students were generally held to be a rough and boisterous lot, and with good reason for they showed little regard for the rules of a well ordered civic life. For example, the cadavers necessary for the learning of anatomy were often obtained during nighttime raids on the local cemeteries by the professor and his students. By the time Potter came along the Medical College of Ohio had in its employ a professional body snatcher, Old Cunnys, whose buggy was occasionally seen rattling through the streets at dawn. The dressed corpse would be seated beside him, and if a passerby were encountered, Old Cunnys would slap the corpse soundly across the face, and loudly tongue-lash him with picturesque epithets ending with, "this is the last time I'm going to bring you home when you're drunk." Never suspecting what he was witnessing, the passerby thought of Cunnys as a Christian soul moved to righteous indignation in his efforts to aid a weak one.[5]

Most of the instruction was given in the large amphitheater and on the wards of the Commercial Hospital. Although poorly maintained and overcrowded, this "city hospital" had witnessed some of the most brilliant medicine and surgery of that period. It was renowned well beyond the limits of Ohio.[5] Upon his graduation from the Medical College of Ohio in 1866, Potter became house physician at the Commercial Hospital for the year 1866-1867. Extant is a handwritten affidavit of his satisfactory service there; it is signed by eight physicians among whom were Drs. Comegys and Wright.

The War Between the States did not interrupt Dick Potter's schooling, but he did enlist in the Ohio National Guard. He was mustered in as a private in Company E, 137th Regiment, on May 10, 1864, and after 100 days' service he was mustered out on Aug. 19, 1864.

Starting a medical practice on one's own in 1867 could hardly be classed as a "get rich quick" venture, and Potter did not find it so. The first item in his ledger records a house call on a Mr. Ingraham: "1867, June 22—To Visit—$1.50." As is the usual case with young doctors, nightfall increased the public's confidence in Richard's ability. The next ledger item is: "1867, Aug. 4—To Visit at night—$5.00." His fees varied with the time the service was rendered, the time and skill required, and the wealth of the patient. Thus, office calls ranged from one to two dollars, operations from one to 10 dollars, deliveries 11 dollars, and when he spent all night with John Gates he charged 10 dollars. About half the time he could collect his fee, although some of his fees went unpaid for as long as two years. Usually he received cash, but at times he received produce, and marked the account "paid by gift."[7]

His practice grew steadily, but his best medical efforts failed to relieve the increasing severity of his brother George's asthma. The cold, damp weather, and the pall of smoke that overlay Cincinnati much of the year kept George ill all of the winter and part of the summer. Approaching the problem scientifically, Dick studied weather reports from the southern and western areas of the country. He became convinced that his brother would do well in south Florida, and, knowing little more about the country than the balmy winter temperature, he determined to close his practice and take his brother south. The final entry in his Cincinnati ledger is dated "1873, Oct. 16."

Their steps quickened by the frosty, 32 degree weather, Richard and George boarded The Texas about nine in the evening of Dec. 14, 1873. As the big sternwheeler churned its way down the Ohio and into the broad Mississippi, stops were made to load sheep, mules, horses, turkeys, corn and other freight. At Memphis they passed four hours leaning on the railing watching the dock workers loading and unloading. "The principal population, looking from the boat at the crowd on the landing, seems to be negroes, which are called 'Smoked Yankees' in the town. It's quite a picturesque sight, for the 'Smoked Yankees' like

bright colors, gay handkerchiefs around their heads, etc., which light up the crowd."[8]

George was fascinated by the river boats. He told of seeing "the gigantic Great Republic;" the James Howard, the largest boat on the river; and the Robert E. Lee, the fastest river boat. At Greenville, Miss., while they were discharging cargo at the wharfboat, the great Republic "came in against us, and sent a couple of passengers across us, and a few trunks and barrels. It was quite exciting as there was a stiff wind blowing, and which of course made it difficult to keep the boats together. Captain Stine got quite profane in his anxiety lest somebody would tumble in, and somebody landed from our boat, had his trunk carried on and off with the Republic, by mistake. There are few things so confusing as a steamboat landing, when at night, with the Captain in a raving hurry, and everything mixed up."[8]

After seven days of river travel they arrived in New Orleans to take up lodging at the St. Charles Hotel for 10 days. Typical tourists, they visited the French Quarter. George was fascinated by the quaint architecture; he commented on the two story houses with their "handsome iron verandahs over the sidewalk," and Jackson Square with its "exquisitely kept" gardens and that "prancing absurdity," General Jackson on horseback.

Dade's First Physician
Richard Bulckley Potter 1845-1909

George Potter's diary ends at the mouth of the Mississippi River, but he made a sketch of Cedar Key which he dated "Dec. 30, 1873" and one of Key West dated "Jan. 2, '74." It seems likely they took a packet to Cedar Key where they boarded the steamer Wilmington which stopped at Key West on its way to Havana. From Key West to Miami there was a single mode of public transportation, the Governor William M. Gleason, which sailed up Hawks Channel and slipped into Biscayne Bay just south of Cape Florida.

Even as early as 1874 homesteads on the Bay were getting scarce. Potter had to go a mile north of the mouth of the Little River and then stake out only 80 acres instead of the usual 160. His neighbor, W. H. Hunt, a politician of doubtful reputation, had called this area Biscayne and had succeeded in getting a post office established upon his property. Potter's claim was entered Feb. 18, 1874, and proved out five years later.

With the help of hired labor the Potters set to work to clear land and build a cabin on the rock bluff overlooking the shallow lagoon (known as Potter's Bight on old charts) that came up to the edge of the present N. E. 10th Avenue. When completed the cabin measured 25′ x 12′ and had 12 foot "posts." There was a single room below and a sleeping loft above under the gable roof. Just outside the kitchen door were the well and lift pump. As soon as time could be spared, they planted watermelons, muskmelons, squash and pawpaws. The necessary staples they bought from the local storekeepers, Brickell, Cash and Ewan. For the protein in their diet they hunted and fished or bought venison, fish, and turtle from the Indians or more able hunters. One of these hunters was William Mettair, who became their close friend and was later Dade County's first sheriff. Billy Mettair was the Wyatt Earp of Dade County. With his famous horse, Prince, his rifle and his unerring aim he established respect for law and order from Fort Pierce south. Clothing, hardware and food items unobtainable at Miami were sent to the boys by the family in Cincinnati. Often, however, items became "lost" on the circuitous journey, or the food spoiled in the hot warehouses at Key West.

The cabin completed and the crops out, Dick Potter and his brother found themselves short

on cash, and began casting about for ways to earn money. With only 25 families around the Bay, and with the competition from the tribal medicine man for the Indian trade, the doctor business held little promise. The store business and whiskey business were already overcrowded. This left as about the only likely possibility Dade's oldest industry, the making of Coontie starch. Coontie, Koontie, or Comptie, as it is variously spelled, is a cycad of the genus Zamia, that once grew plentifully over the pinelands. It has a fernlike top and tuberous root containing starch. This root was pounded or ground to a pulp, and the pulp soaked in barrels of water to remove a water soluble, highly poisonous material it contained. Then the water was poured off and the starch spread out to dry. This starch is palatable bread or cake, and for years before the white man introduced grits it was the chief ingredient of Seminole sofki. The refuse of this process which "contaminates the air with a genuine stink"[9] was used as fertilizer.

Within a few months after their arrival at Biscayne the boys were hiring hands to dig Coontie, and themselves pounding, washing, and packing it into barrels. The starch was then sold to local storekeepers or shipped directly to outlets in Cincinnati or New York. Five hundreds pounds of roots produced 100 pounds of starch.[10] Despite the acquisition of a grinding mill in 1877, they became weary of this business and wrote the folks back home that the very sight of a Coontie root turned their stomachs. Then, too, they were dismayed when they learned that the grocer in Cincinnati who bought the starch from them at the handsome price of eight cents a pound, sold it as arrowroot at 50 cents a pound.

In addition to farming and starch making Richard was appointed U. S. Customs Inspector from April 1875 to September 1876 and Deputy U. S. Marshal from May 1875 to October 1876. Mother Potter always thought Dick lost these two lucrative posts because of his outspoken opposition to the shenanigans of his neighbor, W. H. Hunt. Gov. George F. Drew appointed Richard Clerk of the Circuit Court of Dade County "beginning the ninth day of April, A.D. 1877." During his four year term of office the first will to be executed in Dade County was acknowledged before him.

Finally, on at least one occasion the enterprising young physician dabbled in another one of the more common pioneer industries, wrecking. A note appears in his ledger that he received 34 dollars and 55 cents as his share in the salvaging of the wreck of the Marlin.

As previously noted, the doctor business was not exactly booming, but from time to time there was a bit to be done. For example, when the Negro ship captain, Andrew Price, became ill, Potter attended him on Feb. 29, 1876, and rendered a fee of two dollars.[7] This appears to be the first record of a medical fee rendered in Dade County. When Julia Tuttle's father, Ephraim T. Sturtevant, began having difficulty passing his water, Dr. Potter walked through the pineland to his homestead about two miles west northwest each day for 15 days to attend him. On October 6, 1879, he passed a catheter to relieve Sturtevant. In his ledger Potter noted: "To Operation House $1.00 Visit $1.50." This appears to be the first record of an operation by a physician in private practice in Dade County. The nearest dentist was in Key West or Sanford; so Potter practiced dentistry to a limited extent when he extracted a tooth for Billy Mettair.

Potter's penchant for recording his purchases and sales leaves a record of the drugs he used. He itemized: digitalis, iron, quinine, strychnia, verdigris, jalap, podophyllin, iodide of iron, iodide of potash, sulfur and molasses, gum arabic, and laudanum. The digitalis he prescribed for George's asthma; it was also useful as a diuretic—rubbed on the abdomen or thigh it would at times relieve the dropsy. The iron and strychnia were excellent tonics; the latter helped get Sturtevant on his feet after his long illness. Quinine, though chiefly used to treat fevers, was also useful in headaches, diarrhea and acute rheumatism. Jalap and podophyllin gave him two excellent laxatives, and the podophyllin could also be used to relieve a cough. Verdigris applied locally as a paste seemed to heal the skin ulcers commonly thought due to coral rock poisoning. Gum arabic was his antacid and carminative, and when increasing the secretions was necessary, he had iodide of potash. For intermittent fevers, particularly in children, he prescribed iodide of iron. His sedative, tranquilizer, and analgesic, all in one, was laudanum.[11] In 1881 Father Potter sent Richard a package of "vaccine points." He urged Richard to get a scab at once as the vaccine was good for only three weeks. It was his thought that Richard could make money "vaccinating the Indians at $1.00 per head."

Dr. Potter was not without a romantic interest. Some time prior to his move to Biscayne he

became engaged to Ella Hosea, the cultured, sensitive daughter of a wealthy owner of Mississippi River steamboats. Although her father actively favored the marriage and even financed the building of a comfortable house near the Biscayne cabin, Potter was hesitant about the marriage. He finally terminated the engagement and remained a bachelor throughout his life. Potter's action was followed by threats and attempts on the part of the girl's father to force Potter to repay him the amount he had invested in the house. Potter could not do this without selling the Biscayne property, and no buyer could be found who would pay a reasonable price.

Miami in 1879 was a sleepy little community of 25 families spread from north of the Little River to south of Coconut Grove.[12] For some years the settlers had talked of a railroad that would some day be built from Jacksonville down the east coast to Miami and on trestlework all the way to Key West, but there seemed no immediate prospect of this. While the Biscayne Bay community was showing little growth, a few miles north on the shores of Lake Worth a community was growing rapidly. The people up there wanted a doctor, and made overtures to Dr. Potter to come up and join them. Excited by the prospects of a more active practice of his profession, and fed up with starch making and scrounging an existence from the rocky soil, Dick and his brother took the offer seriously. In 1881 George claimed a 160 acre homestead on the ocean side of Lake Worth and just south of the heart of the present day Palm Beach. For a few months Dick remained at Biscayne hoping to find a buyer willing to pay $2,000 for his 80 acres. The buyer was not forthcoming; so in May 1882 Richard joined his brother on Lake Worth.

The Key West—Miami Link
1874

The Cabin at Biscayne
(from a drawing by George Potter)

The land rush was on, and by 1886 the west shore of the Lake which two years prior had sported a single log cabin was rapidly building up. In 1887 the Lake Worth Community, now known as Palm Beach, had a population of 400 while the Biscayne Bay Community had 150 people.[13] Land on the ocean side of Lake Worth was selling for 10 dollars an acre while that west of the Lake brought a dollar and a quarter an acre.

The days of travel in South Florida by foot or sailboat were steadily waning. The trip from Jacksonville to Lake Worth was no longer formidable. One could take a comfortable train from Jacksonville to Enterprise, then on a spur track to Titusville. There he boarded a steamer to Jupiter where a narrow gauge railroad, known as the Celestial Railroad (it connected Jupiter, Juno and Venus) carried him to Juno on the shore of Lake Worth. A local steamer then took him to Palm Beach. In December 1892 the county road between Lantana and Lemon City was completed. About a month later a horse-drawn hack seating six persons began scheduled trips from Lantana to Lemon City with an overnight stop at Stranahan's camp at New River (the present Fort Lauderdale). This eliminated a somewhat dangerous trip by sailboat or a 60 mile walk down the beach which cost five dollars if you wanted the company of the "barefoot mailman."

"Growing pines" was one of the major industries of the Lake Worth area and the Potters, like many other settlers, planted a large pineapple plantation on the west side of the Lake. Richard had the distinction of being the first in the area to ship pines north with the trademark of the Indian River and Lake Worth Pineapple Growers' Association. Dick was also on the board of directors of the first bank organized in the area, The Dade County State Bank.

Dr. Potter has another distinction of sorts. He is among the few Republicans who have twice served in the House of Representatives of the State Legislature from Dade County. He first ran for it successfully in 1880, but the second time, 1896, he was drafted and easily won the election although he did not have the endorsement of either party. In the 1897 session he was one of only two Republicans in the House of Representatives. He also served his community as Justice of the Peace, Elections Clerk, and a second term as Clerk of the Circuit Court beginning November 1892.[14]

For the first several years after moving to Lake Worth Richard lived with his mother, brother George, and sister Ellen, on George's homestead. In 1893 he bought land from his sister on the west side of the Lake and built a residence-office on the lake front near the foot of the

The Office-Residence at West Palm Beach
(Dr. Potter and bicycle)

present Gardenia Street. One year later this area was incorporated as the City of West Palm Beach.

It might well be said that Richard had moved his office to be near his work. West Palm Beach in those days resembled a western mining town. The populace, mostly workmen employed by Mr. Flagler, lived in tents and shacks, and were given to expressing themselves freely particularly when under the influence of strong drink. Within the four years after Richard moved among them there were 17 killings, one lynching, and hundreds of shooting and cutting scrapes.[15]

The demand for Potter's medical knowledge was far greater on the Lake than it had been on the Bay. In letters to the folks in Cincinnati he made urgent requests for medical books, instruments, and medicines. In the early days he made his rounds on foot or in his 20 foot black catboat. Old residents recall seeing "the Doctor" becalmed out in the middle of the lake at times for an hour or more. When the whole Peterson family got sick up at Jupiter, he loaded a knapsack with medicines and food, hiked 15 miles up the beach and spent a week feeding and doctoring them until they all got well. Richard was like this; he liked to help folks no matter what it took.[16]

Then there was the time in 1886 when Ole Man Moore, a retired seafarer, could not pass his water and went out of his head. Richard tried unsuccessfully to pass a catheter: then with four men holding the patient on the dining room table, and with whiskey as the anesthetic, Dr. Potter cut into his lower abdomen and placed a tube in the bladder. The operation was a success, but in a spell of confusion three days later the old man yanked the tube out and died soon thereafter.

Dr. Potter developed a general practice but with more surgery and obstetrics than medicine. With the aid of a Negro midwife, Millie Gildersleeve, he delivered the children of many of the pioneers in the Lake Worth region. Millie was a neat, industrious, and highly intelligent freed slave from Georgia. She raised five children, giving each of them a good education, and died of cancer Feb. 16, 1950, at the age of 88. It is said that Millie lived on the lake shore, and that Potter would pull up to her wharf in his naptha launch (acquired in 1893), toot his whistle, and Millie would pick up her bag of instruments which was always kept in readiness near the door, and come scurrying.

In his early days on the Bay he had developed a reputation among the Seminole Indians as a good medicine man, and when he moved from Biscayne to the Lake they followed him. Mrs. Ben Crowell Stewart, his niece, remembers that in childhood she frequently saw an Indian, often accompanied by his whole family, sitting on a bench in front of the office waiting his turn to see the doctor.

One thing attractive about being a pioneer physician was the absence of "meetings." Potter, however, was not destined to escape from this "blessing" entirely for his name appears on the roll of the charter members of the Dade County Medical Association.[17] Until 1909 Dade County extended from Old Rhodes Key to Jupiter. At the December 1903 meeting Potter was elected vice president to succeed Dr. N. S. Burnham, who was also of West Palm Beach. He was a member of the Florida Medical Association and the American Medical Association, and was local agent for the State Board of Health at Lake Worth. For many years he was a surgeon for the Florida East Coast Railway.

Early in the year 1909 Dr. Potter began losing weight and strength despite a good appetite and food intake. He had a little nagging discomfort in his left upper abdomen. One day he noted blood in his stool, and this confirmed his suspicion of a tumor in the bowel. There being no adequate facilities at the Lake for the surgery he knew was necessary, he boarded the train for Jacksonville to consult an old friend, Dr. Carey P. Rogers. Dr. Rogers concurred in his diagnosis, admitted him to St. Luke's Hospital on July 8, and performed a laparotomy on July 10. Rogers found a carcinoma of the splenic flexure of the colon which was already beyond successful resection. Dr. Potter's course was rapidly downhill ending in his death on July 13, 1909. His body was returned to West Palm Beach and interred at the Woodlawn Cemetery.

The author wishes to express his appreciation to the many people who have assisted him and, in particular, to Mrs Ben Crowell Stewart, who made available letters, a diary, a ledger and pictures.

References are available from the author upon request.

245 Southeast First Street.

Some Medical Highlights of Florida's West Coast

Rowland E. Wood, M.D.
ST. PETERSBURG

The medical history of Florida's West Coast is tied closely to the climate. Since Ponce de Leon searched Florida for the Fountain of Youth, some men have looked upon the area from Tarpon Springs to Naples as a sort of Shangri La promising health, happiness and longevity.

During the Seminole Wars, Fort Brooke in Tampa was one of the principal bases. More important than the wounds of battle were the ravages of disease. Malaria, yellow fever, and dengue fever took an awesome toll. On April 2, 1841, the U. S. Army established Fort Harrison on the site of Clearwater as a convalescent post for the soldiers at Fort Brooke recovering from wounds and disease. This probably makes Clearwater Florida's first health resort. The success of the project is rather dubious. since, for reasons known only to the U. S. Army, the post was abandoned on October 26, 1841. Clearwater was not only the first health resort, but also one of the shortest duration.

The Spanish American War thrust Tampa into the role as the principal port of embarkation for the troops going to Cuba. In 1898 troops were assembled in Chattanooga and shipped by rail to Tampa. Once again disease played its ever present havoc on the Army. This time it was typhoid fever that decimated the ranks. The large concentration of troops polluted the water supply, and new sources had to be found. Across Tampa Bay was the little fishing village of St. Petersburg, and its Reservoir (now Mirror) Lake. The water of this lake was found to be pure and of good quality. The U. S. Army built a pipeline from the lake to the railroad pier, where boats took the water across the bay to Tampa for the troops to drink and to supply the ships sailing to Cuba. This water supply was so important that a company of troops remained in St. Petersburg throughout the war guarding it.

In 1874, Dr. B. W. Richardson of London proposed that a "Health City" should be built. The result was that surveys were made throughout the world of various climatic conditions. Dr. W. C. Van Bibber of Baltimore became interested in this project and made extensive studies. He decided that St. Petersburg (then Pinellas) was the ideal location. At the thirty-sixth annual meeting of the American Medical Association at New Orleans in 1885, Dr. Van Bibber read a paper and reported in part as follows:

> Where should such a Health City be built? Overlooking the deep Gulf of Mexico, with the broad waters of a beautiful bay nearly surrounding it; with but little now upon its soil but the primal forests there is a large sub-peninsula, Point Peninsula, waiting the hands of improvements. It lies in latitude 27 degrees and 42 minutes, and contains, with its adjoining keys, about 160,000 acres of land.
>
> "No marsh surrounds its shores or rests upon its surface; the sweep of its beach is broad and graceful, stretching many miles, and may be improved to an imposing extent. Its average winter temperature is 72 degrees; that its climate is peculiar, its natural products show; that its air is healthy, the ruddy appearance of its few inhabitants attests. Those who have carefully surveyed the entire state, and have personally investigated this sub-peninsula and its surroundings, think that it offers the best climate in Florida. Here should be built such a city as Dr. Richardson has outlined.

This report had a marked effect on the growth of St. Petersburg as a mecca for older people.

Thomas A. Edison, Henry Ford and Harvey Firestone built homes in Fort Myers and lived there during the winter months. The publicity they received gave this area a tremendous boost and growth.

In 1930 the American Legion Crippled Childrens Hospital was opened in St. Petersburg and the staff was soon joined by Dr. Prescott Le Bretton. This was a happy arrangement. The hospital served the entire state and as the hospital grew, so did the state, and the Florida State Crippled Childrens Commission was an outgrowth of this institution.

In the late 1930s the famous New York orthopedic surgeon, Dr. Fred Albee, opened an orthopedic hospital at Venice, Florida. Dr. Albee had a unique arrangement. He continued his practice in New York, but once a week he would fly by chartered plane to Venice and operate, then fly back to New York. Things went along very well until the Seaboard Railroad started advertising Dr. Albee and his hospital in their dining car

Railroad Pier, St. Petersburg, Florida, circa 1898. Courtesy of the St. Petersburg Times.

menus. This led to a great deal of bitterness with the American Medical Association, and the hospital was eventually closed, and a dream vanished.

Smallpox Epidemic

An interesting event took place in St. Petersburg in 1921. An epidemic of smallpox broke out in the Negro school. Dr. Alvin J. Wood, the City Physician, made a sincere effort to vaccinate the students. This he found to be an operation in futility, and he reported the same to Mayor Frank Pulver. Mayor Pulver was a man of action, and he acted. Leading the St. Petersburg Police Force, he surrounded the school, while Dr. Wood led a task force of physicians and nurses into the school. The entire school, students and teachers alike, were vaccinated for smallpox by force. The epidemic was ended. No legal action was ever taken.

Quackery

In 1914 Governor Sidney Catts appointed a young Tampa doctor, Dr. William M. Rowlett, to the State Board of Medical Examiners. Dr. Rowlett found that approximately half of the doctors of Florida were either quacks or fakers. Investigation revealed that one of the board members was selling licenses, and diploma mills were selling degrees. After much hard work and with the aid of the postal authorities, Dr. Rowlett succeeded in having the guilty board member sent to federal prison for using the mails to defraud. In 1921, Dr. Rowlett wrote and pushed through the legislature the New Medical Practice Act, which brought order out of chaos, and respectability to the medical profession. The people of Florida and the medical profession will always be in his debt.

2201 Fourth Street North.

Don Juan Ponce De Leon and the First Operation in Florida

Clifford C. Snyder, M.D.
CORAL GABLES

The critical historian of today reviews with conjecture reports of America's discoverers. Stories of Norsemen sailing along our eastern shores as far south as Mexico appear intermittently in current chronicles. The shadow of Americus Vespucius as discoverer of the North American continent lingers yet, although somewhat faded in the light of present data. There are men of historical intellect who remain doubtful of the achievements of Christopher Columbus. Though his first landfall was the Bahamas and later Cuba, the Admiral in his audience with King Ferdinand and Queen Isabella gave no information regarding the mainland which was so near. There are authorities who in their research reports have convinced others that John Cabot discovered America on June 29, 1492, which would be three months prior to Columbus' date of discovery. Although some skeptical scholars look askance upon the dates that Juan Ponce de Leon sailed on his voyages to this country, there are no "Doubting Thomases" regarding the history of Florida concurrent with this famous Spanish name. The children in our schools are as familiar with the name Ponce de Leon as that of our governor—if not more so.

It was some 505 years ago, historians claim, that the life of Juan Ponce de Leon began in the little Spanish town of San Tervas de Campos, which today is in Valladolid.[1] There is documented proof that Juan was a relative, probably a nephew, of the celebrated Don Rodrigo Ponce de Leon, Duke of Cadiz. Most historians set the date of Juan's birth during the 1460s, though there is no document nor even mention of his parents. When young Ponce became of age he entered the service of Don Pedro Nuñez of Guzmãn. It was customary in those days for sons of men of rank or other promising youngsters to begin their military training as page boys, later becoming squires and then soldiers of the Crown. The social position of a soldier was that of a gentleman. Don Pedro Nuñez was Lord of Teruel, a province of Spain. Each province had an army and the lord was commander of his own soldiers. When the king asked help, the lord led his army in the service of the country.

The marriage of King Ferdinand of Aragon and Queen Isabella of Castile in 1469 was the impetus for Spain's rise to power and prestige in the world. It was not long after this royal event that Spain engaged Portugal in battle and decisively defeated this adjoining country. Young Ponce distinguished himself in battle during the Portuguese War. He was knighted by the sword of King Ferdinand and thereafter was addressed as Don Juan Ponce de Leon. The next war for Spain was not as swift and easy as that with Portugal. To drive the Moors of African origin from their holdings in southern Spain necessitated 10 long and difficult years. Ponce again was very active and along with his adopted father Don Pedro Nuñez received many commendations from Ferdinand and Isabella. The Moorish king, Boabdil, surrendered his Alhambra to the Spanish crown on January 2, 1492. Ponce remained in southern Spain with the army of occupation. During the interim Admiral Christopher Columbus had returned from his first voyage to the Western Hemisphere with exciting stories of conquest. The following year he prepared a fleet of 17 ships and left on his second voyage for the Western Hemisphere. One of the many young officers to sign aboard was Capitan Ponce de Leon.

Settled in Puerto Rico

In 1493, the about 33 year old Ponce arrived in Hispaniola (now Haiti). He fared well militarily by subjugating the Indians in Higuey, a province. He was granted some land and soon became financially successful on his plantation of sugar cane, tobacco, coffee and vegetables. He took a wife and soon requested privilege to explore a near island known as Boriquen (Puerto Rico). He was a natural organizer and shortly was made Governor. He constructed a home, a cathedral and other dwellings in Caparra (near San Juan). His wife bore him a son and three daughters. Again, he became a wealthy plantation owner and loyal subject of the Crown. The In-

dian natives of Boriquen who worked on his plantation were devoted to him.

Diego Columbus, one of the two sons of the deceased Admiral, became Governor of Hispaniola in 1509, and relieved Ponce of his duties in Puerto Rico.[2] In the year 1513 Ponce was about 53 years of age and in excellent physical condition. He desired to become Governor again but not of Puerto Rico. He had learned of a northwestwardly island named Binyny (Bimini) which had a fabled spring of water that would restore youth to those who drank of it or bathed in it. Though the waters of Bimini were not his foremost purpose in exploring the island, it did add spice to his conquistador spirit. He asked permission of King Ferdinand and received a cédula to proceed on his journey. Ponce was extremely careful in planning for this voyage. It was not a simple matter for even a man of wealth, such as Ponce, to procure adequate ships in this part of the world, where they were in great demand. The Spanish Crown indeed did help. The ships were selected competently, for on the entire voyage there was not material defect in any of the three. The largest ship was a caravel and Ponce used this as his quarters and also for carrying most of the supplies. The next was a brig and the third a brigantine both of shallow draft and dependable for sailing into small bays without going aground. An adequate number of sailors, soldiers and slaves was selected. Food was made plentiful to begin the trip. The pilot was Antonio Alaminos who later was to become the leading navigator of his day in the Caribbean waters.

Pascua Florida

Antonio de Herrera, the Royal Historian in Madrid, reported the voyage day by day which he retrieved from the personal logbook of Ponce de Leon. Finally, departing time arrived and with the last rope in position, the sails unfurled and the anchors raised, the ships left San Germain (San Juan) at 3:00 p.m. on Thursday, March 3,

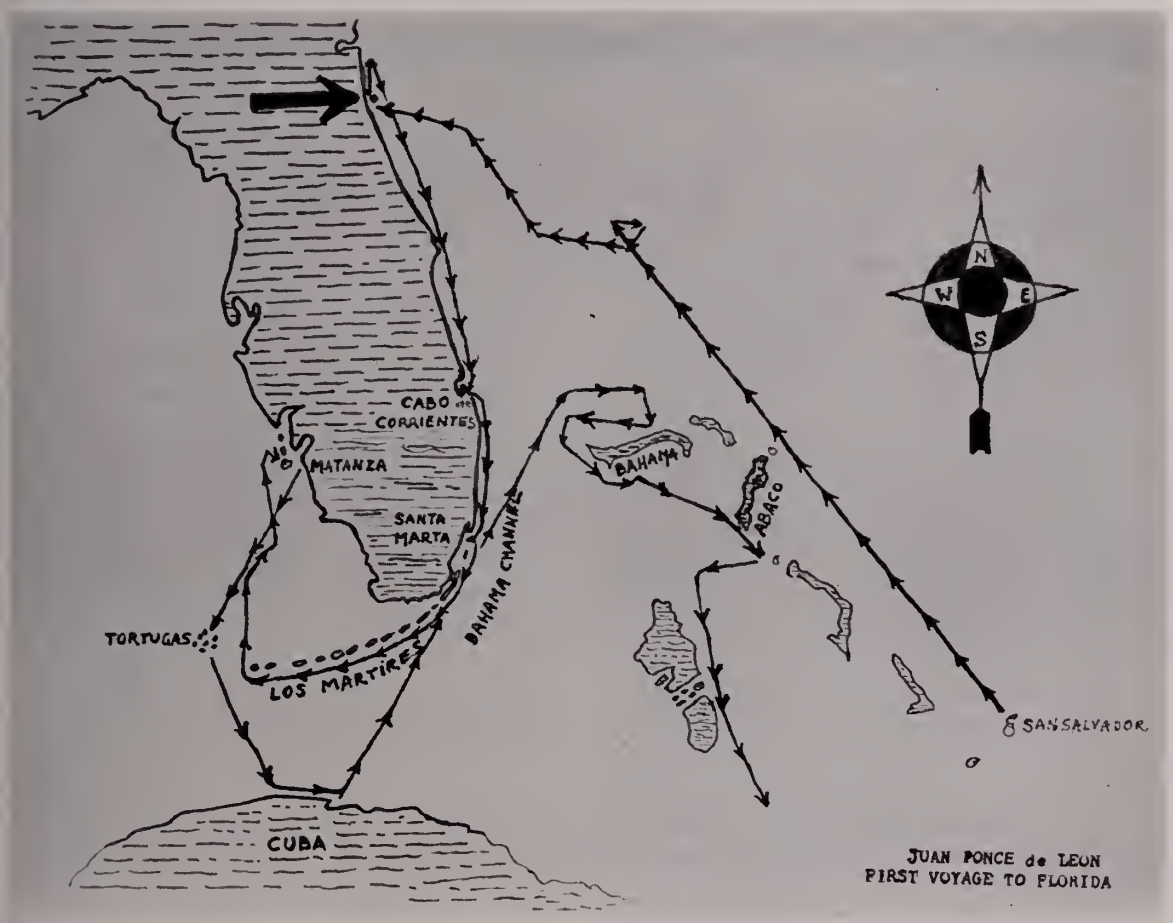

Fig. 1. — Ponce de Leon landed on Florida soil between Matansas and Mosquito Inlets on Saturday, April 2, 1513 and claimed the land in the name of Spain. After sailing down the east coast and up the west coast, he doubled the southern tip and returned home by way of the Bahama Islands.

1513. They passed an island, probably Abaco, on Easter Sunday, March 27, but did not stop (fig. 1). It is regrettable that some historians continue to ascribe Easter Sunday as the day of Ponce's landfall on the shores of Florida. It is excusable that authors are not able to exhaust voluminous reference material because of time limits, but correct dates for this unsurpassed event in Florida history now have been substantiated and well defined and are available for everyone's perusal. Such carelessness is contaminating.

On Saturday, April 2, 1513, Ponce de Leon's little argosy of three ships FIRST sighted the mainland of Florida. This memorable day in American history was during the Eastertime religious holidays remembered as the Feast of Resurrection, or the Feast of Flowers. This land was known to the Indians as Cautia. Ponce renamed this ancient land of Cautia, Pascua Florida. It can be said without hesitation that the first sight of land, as well as the initial landing, took place south of Matanzas Inlet and north of Mosquito Inlet. After taking possession of the land in the name of the Spanish Crown, he reconnoitered the area and then cruised to the south. The ships anchored at Cape Canaveral to take on fresh water and firewood. Ponce went ashore with some of his men to make friends with the natives. The Indians were not as sociable, greeted the Spaniards with hostility and wounded one of the crew (this may have been the first white man wounded on American soil). Ponce did not wish to skirmish and after taking an Indian captive, retreated to the ships. The Indian was to be a guide and also teach Ponce the names and positions of various points of importance. The crew was to treat the Indian as one of them so as to win his friendship and later his chief and other natives. Heading the ships southward, he came to a river which he named La Cruz because two bodies of water crossed at this point. As was the custom of the Spanish conquistadors, a cross was used as a marker and placed in the river. This crudely carved cross of stone is one of the most valued of all the treasures of Florida. Strange as it may seem, it is still undiscovered. There is no treasure chest that would thrill the finder more than to retrieve this cross with the message on it carved for Juan Ponce de Leon—a definite proof of the discovery of Florida which every historian could not help but acclaim.

The ships resumed their voyage to the south. Such landmarks were logged as Cabo de Corrientes (Cape of Currents at Jupiter Light), Choqueche (Miami Beach), Santa Marta (Virginia Key), and Achecambēy (Matacumbe Keys). When the Archipelago of Florida Keys was being passed, the Indian guide remarked that this group of small islands from a distance resembled men's heads bobbing on the water surface as if in distress (drowning). For this reason Ponce named them Los Martires (the martyrs), and the name was not erroneous because many have died on these reefs since. The ships next dropped anchor at Dry Tortugas. Here, a cargo of salted turtle steaks, slabs of manatee and sea gull breasts was taken aboard. Alaminos, the pilot, pressed Ponce into exploring the Florida west coast. It is thought that the northern limit of this voyage was Sanibel Island. The Spaniards encountered attacking Indians and killed many. This island was then named by the Spaniards, Matanza (massacre) for the Indians killed. The ships stopped at Dry Tortugas on the return trip, cruised the northern part of Cuba and headed toward Bimini. En route they were confronted with severe stormy weather (this was September and hurricane season), and made port in the Bahamas. As soon as the storms ceased Ponce decided to send Alaminos and Ortubia, Captain of the brigantine, to find Bimini while he returned to Puerto Rico. He arrived home October 15, 1513 after covering 7,000 miles in seven months and 11 days. Alaminos and Ortubia returned a few days later with news they had found Bimini, but no "Fountain."

Ponce did not waste time and went personally to narrate his experiences and present his voyage record to the Spanish Court. This personal audience with King Ferdinand was obtained through his former teacher, Pedro Nuñez of Guzmãn, who now was in high favor at Court. Ferdinand was impressed and rewarded Ponce for his efforts by giving him a Coat of Arms and making him Governor of Florida and Bimini. His official title was styled, The Adelantado don Juan Ponce de Leon, Governor of the Island of Bimini and Florida, and Capitan of the Island of San Juan de Puerto Rico. This last title gave Ponce exclusive privileges to war against the Caribs. There was little military activity for Ponce after returning to Puerto Rico from Spain. He had considerable holdings and he grew more wealthy annually. The year 1521 found Ponce semiretired. Luis, his only son, was devoting his life to the priesthood. His three daughters were married and his wife had

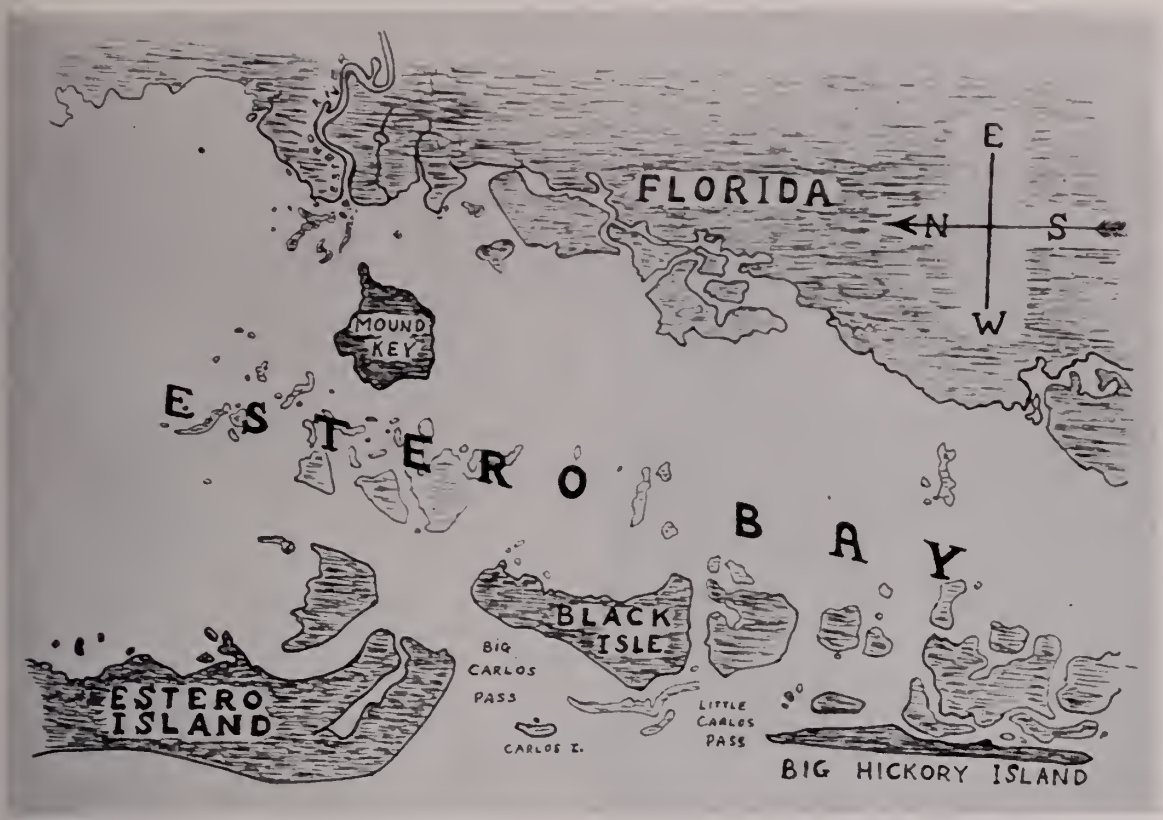

Fig. 2.—On his last voyage, Ponce surveyed the west coast of Florida and decided to sail into Estero Bay where the water was somewhat deeper and islands were plentiful. Mound Key was the tribal headquarters for the Caloosa Indians.

died two years previously. Save for a restless master and his servants his home was empty. Since his first voyage to Florida, disturbing bits of news had intermittently been drifting back to Ponce regarding this country. Florida was no longer considered an island, but instead a part of a large continent. Trading trips to Florida had resulted in fortunes of gold obtained from the Indians. Cortez was relating glowing descriptions of his conquest in Mexico and proved it by sending substantial presents back home to the Spanish Crown. Garay, Governor of Jamaica, had sailed the entire Gulf Coast from Ponce's Florida to Cortez's Mexico. Aýllon was bringing shiploads of slaves from northern parts of Florida and Bimini Island. This last bit of ill news goaded Ponce into action. He had given his pledge to the many Indian guides he had utilized since being in the New World that they would never be enslaved. He carried his complaints to the Court in Spain. His continued rights to Bimini and Florida were confirmed in a formally issued cédula.

Return to La Florida

These described actions that were taking place nourished the reason for Ponce to return to Florida, though some historians insist on introducing the fabled Fountain of Youth as the determining factor for his last voyage. Ponce had certainly not completed his explorations in Florida. His desire was to colonize La Florida and become its Viceroy. He forbade anyone else to invade this land and disturb the natives to more hostility. He wished to bid farewell to Puerto Rico where there had been a continuous change of government officials, some of whom harrassed his position. These are the reasons that he invested a large part of his fortune in two ships, carrying "one interested in medicine," clergymen, settlers, 200 soldiers, 50 horses, domestic animals, seeds, agricultural and forestry tools, provisions and arms. For the conquest of Peru, Pizarro mustered only a hundred soldiers. Cortez, for the task of conquering hordes of Indians in Mexico, had only 16 horses. With such figures, one understands the seriousness of Ponce de Leon's obsession. It is

Fig. 3. — While the Spaniards were unloading their cargo the Caloosa Indians attacked. Many were killed as well as wounded. Ponce received an arrow in his inguinal area which necessitated medical attention.

doubtful that this man of "sixty-ish" had such romantic quest for a fountain as has been suggested.

Juan Ponce, on February 25, 1521, wrote two letters, one addressed to King Charles and the other to Cardinal Tortosa, who was to become Pope Adrain. Both epistles announced the Adelantado's intention to leave Puerto Rico for Florida in a few days. No one knows the exact date of his departure and very little is definite regarding his ship's log, but it is certain that he cruised northward along the west coast of Florida and finally made a decision to anchor and disembark on an island in Estero Bay (fig. 2). Almost in the middle of the bay is an island named Juchi (Mound Key) shaped like one of the ubiquitous horseshoe crabs. Mound Key was the tribal headquarters of the fierce Caloosa Indians. The cacique, or chief, was a tall dark bronze-colored, physically fit overlord who was known as Escampaba to his Indian tribe and Carlos to the Spanish. The Caloosas were strong warriors and they hated the white man. Their stable bows could drive arrows through two coats of Spanish mail. In close quarter fighting they were adept with hatchets and spear and even struck with their fists.

First Operation

Ponce had surveyed Estero Bay from the sea and there was no sign of inhabitants or huts. The water was deep enough and so he gave the order to come about and sail slowly into the bay. He moved with caution so as not to be surprised by an attack. The flats were clear, the treetops were still and flights of birds passed by in tranquility. The area appeared uninhabited. He well knew that sooner or later the Indians would find them and a battle would ensue, but he wanted to be prepared. Ponce ordered the ships to drop anchor and start unloading supplies. Sentries were stationed and a strong group of soldiers with Juan Ponce in the lead went into the woods to clear an area for a stockade. Though guards were on duty while the men worked, the attack came swift and strong. Indians appeared from all angles, running, crawling, shouting and spearing (fig. 3). The Spanish responded with their weapons and the battle raged furiously.

Fig. 4. — The arrow was very deep into the thigh and Ponce became very ill. His men carried him to a safe spot to retrieve the arrow.

The superior weapons and armor were advantageous for the conquistadors and they seemed to be winning the melee when their leader was the recipient of an arrow that pierced his inguinal area. The "mediciner" treated his wounded Capitan. Removal of the deeply penetrating arrow left a serious wound and Ponce realized that this would not heal rapidly. At first he did not let this interfere with the skirmish, but shortly decided it best to search for the nearest Spanish possession where physicians had better facilities to care for him and his wounded soldiers. Ponce was carried to his ship (fig. 4) and both vessels headed south for Cuba leaving many dead Spanish soldiers on Florida soil. From the statements of Ballesteros[3] it is apparent that the arrow was removed from his thigh and Ponce attempted to continue fighting but became seriously ill and had to be taken back to his ship. It is not clear who removed the deeply imbedded arrow (later believed to have fractured the femur), but it was retrieved on Florida soil. In all probability no one but the mediciner would be entrusted with such an important task, and he certainly treated the wound aboard ship.

Regardless of absent detail, this is the first known operation on a white man in what is now the state of Florida and most likely in what is now the United States. Ponce became very ill and insisted on returning to Havana immediately and not to his home in Puerto Rico. This trip was to be his last. Upon arriving in Havana he made a testament and then gave his soul to God. His son, Father Luis, had Ponce's remains returned to his beloved island in the Caribbean (fig. 5). His epitaph reads, "Here lie the bones of a Lion, mightier in deeds than in name."

Fig. 5. — The Adelantado don Juan Ponce de Leon, Governor of Florida and Bimini, and Capitan of San Juan de Puerto Rico is buried in San Juan Cathedral in Puerto Rico. The Lady of Spain is seen with her arm enclosing the monument and kissing the sepulchre.

It was catastrophic for Spain that Ponce de Leon's expedition against the Caloosa was unsuccessful. If this colonization attempt had survived, Spanish Florida would have presented a different history. Instead of a colony with a military base in St. Augustine and a few scattered missions, all of which drained the coffers of the Crown, there would have been vast plantations of fertile lands, cattle and flourishing population to contribute foodstuffs and commodities to Spain. Ponce was a colonizer and executive, while other Spanish explorers such as Narvaez, De Soto and Menendez were professional soldiers and unexperienced administrators. If Ponce had managed to found a settlement on Florida's west coast through his judgments and economic legislation, today the map of North and South America (in fact, the world) would take on an unfamiliar appearance. Florida, at an early period, extended from Canada on the north, to the Mississippi River on the west, to the Gulf of Mexico on the south and to the Atlantic Ocean on the east. Although these speculations may be fascinating to some, remember if such had happened, we never would have had a "Damn Yankee" nor heard a "Rebel Yell."

References

1. Murga, V. S.: Juan Ponce De Leon: Juan Bravo, Madrid, 1959.
2. Barcia, A. G.: Chronological History of the Continent of Florida. (St. Augustine Historical Society) University of Florida, Gainesville, 1951.
3. Ballesteros, M. G.: La Idea Colonial De Ponce De Leon, Ediciones Rumbos, Barcelona, 1960.

214 Alhambra Circle.

Medical Men and Medical Events in Early St. Augustine

WEBSTER MERRITT, M.D.
JACKSONVILLE

Toward the end of the sixteenth century, now 355 years ago, Gonzalo Méndez de Canço arrived in St. Augustine* to take over the duties of governor for Spanish Florida. With him came a secular priest to serve as chaplain of the presidio, 24 soldiers, and 10 or 12 women "of good reputation" who were expected to become the wives of soldiers already living in the fortified little town. These newcomers found that St. Augustine was already health-conscious. At least two "barber surgeons" had located there, and a hospital was under construction when they arrived. This little hospital, the first ever designed exclusively for care of the sick within the present limits of the United States, was joined (". . . el hospital que esta agregado a la hermita") to the hermitage of Nuestra Señora de la Soledad, the Chapel of Our Lady of Solitude. That original building which served as a chapel, or another of similar architecture which replaced it, had been constructed prior to Drake's attack in 1586. The property today is owned by the St. Augustine Historical Society and is known as the Oldest House in the United States.**

Governor Canço almost immediately recognized the value of the primitive little hospital not only to the community but to the province as well. He stated that it had been responsible for saving the lives of many soldiers, Indians and Negroes who had been confined there. He appealed to the King for funds and asked that a slave in the royal services at St. Augustine be allowed to attend the sick in the hospital.

On March 14, 1599, less than two years after this first hospital had been constructed, the Franciscan monastery nearby, on the site where the state arsenal is located today, was destroyed by fire. Consequently, the friars were moved into the Chapel of the Soledad and the hospital which adjoined it. Thus for all practical purposes the hospital ceased to exist.

Recognizing the necessity for another hospital, Governor Canço soon began construction of a new building. In a letter written by him on April 24, 1601, reporting on conditions in the presidio, he referred to the hospital as that of "Santa Barbara, to which the King has made a gift."* The Santa Barbara was an institution of "decent appointments" with six beds. Constructed of "palm," it was said to have been well built. It assured the people of the little settlement "that the work of charity would not cease."

It seems likely that the Santa Barbara Hospital was located on a marshy spot which today is near the head of Maria Sanchez Lake at the corner of St. Francis and Cordova streets, perhaps on the property of Miss Emily Wilson at 280 St. George Street. It was there that the Santa Barbara Battery was located in the mid eighteenth century, toward the end of the first Spanish period.

Perhaps overzealous and apparently intending to disparage and belittle his predecessor, Governor Ybarra on Dec. 26, 1605, wrote to the King:

> The hospital was built in an unhealthy locality and so very small that out of every six soldiers that entered it to get cured three would die and the other three would not convalesce. As I have now built another good church and house for those good fathers I have had the hospital moved back to the place next to the hermitage and by private contributions I have enlarged it and almost made it new over again. So that now the sick soldiers and slaves find more relief and comfort and recover much more easily — besides it is not in danger of being destroyed by fire as it was before. I intend to send to Havana for one of the Brothers of the Hospital Juan de Dios so that I may save the services of a soldier who is now [here]. This I did at the suggestion of the Council and because it was necessary. The palmetto house which formerly was used as a hospital [Santa Barbara] I ordered to be turned over to Captain Juan Garcia who is the legal representative of Gonzalo Méndez [Canço] the ex-governor. All these matters are on record as they appear in the documents which were drawn.

*Governor Canco arrived in St. Augustine on June 2, 1597.

**Validity of claims for the Oldest House has been challenged, chiefly by Mr. Charles Reynolds, historian, author and bibliophile, when he exposed some of the brashly false statements made for sites of historical interest in St. Augustine. It would seem, however, that the conscientious historian is justified in accepting the available evidence supporting the claims as strongly presumptive if not authentic. It is to be hoped that one or two weak links in the long chain of evidence will be forged later.

*Chatelain apparently has confused the identity of the first hospital with that of Santa Barbara.

During these early years the little hospital, like the church, was badly in need of funds. The poor who expected to be taken care of in times of sickness gave alms for its support, and religious plays were enacted in the Chapel of the Soledad and somewhat later, it has been stated, were performed at the Royal Hospital for the benefit of the sick. Just when the Royal Hospital was founded is not known. The street on which it faced was first named Street of the Royal Hospital; later, the name was shortened to Hospital Street. Finally, in 1923, when St. Augustine was given the coffin of its founder, Pedre Méndez de Aviles, the name was changed to Aviles Street. The building was located on the west side of the street, facing east, about midway between what is now King Street and Artillery Lane, where the theater is located today. It is thought that the hospital adjoining the chapel, mentioned by Governor Ybarra, and the Royal Hospital may have coexisted.

It is somewhat surprising to learn from the Bulas y Cedulas para Gobierno, dated July 3, 1573, that each Spanish town was supposed to support two hospitals. One for the poor, suffering from noncontagious illnesses, was to be built "adjoining the temple [chapel or church] with a cloister to it." The other, for those suffering with contagious diseases, was to be built on elevated ground if possible and in a region where the prevailing wind passing by it would not harm the rest of the settlement.

It is regrettable that, today, records of St. Augustine's early history are meager. There is little wonder, however, that many details cannot be found. There were hurricanes, northeasters, floods and fires. Indians frequently ambushed and attacked soldiers and citizens in the little presidio. Drake invaded the town in 1586 and virtually burned it down, leaving only church property and records. The pirate, Robert Searles, alias Davis, attacked in 1668 and took away much that was of value. Moore came in 1702, Palmer in 1728, and finally Oglethorpe laid siege to the town in 1740 and for a prolonged period fired salvos intermittently at Fort San Marcos. In addition to these frightful hazards, reports and records sent to Cuba and the Indies frequently were lost by shipwreck or capture.

During the administrations of Governor Canço, 1597-1603, and his two able successors, Ybarra and Olivera, who governed until 1612, St. Augustine presented a picture indicative of a boom, which apparently followed fire, high wind and flood in 1599. Canço described the town as having ". . . much public adornment of temples, of yglesie mayor [the parish church], the convent of San Francisco, the hospital, the hermitage of San Sebastian," and more than 400 Spanish people. Yet in those relatively good times, ample food and nourishment sometimes became a problem for the governor to solve. The illness of Father Lopez, in 1602, brought to the attention of the public the fact that some of the friars were receiving insufficient rations. Two physicians of the presidio who attended Father Lopez declared before Governor Canço that the 3 reales allotted him daily were entirely inadequate for "the good friar" needed fowl and much else. They reminded him that one chicken cost 8 reales. The governor declared that because of his faithfulness and great service, Father Lopez henceforth would receive 10 reales daily for purchase of food.

When Diego de Robelledo, the first really able and conscientious governor at St. Augustine for more than 40 years, took up his duties in 1655, the town presented a gloomy picture. The system of subsidies from New Spain had become completely disorganized, the English had taken over Jamaica, and the Dutch were reported to have visited the Spanish frontier fort in Apalache. The inhabitants and many of the Indians had suffered from smallpox for 10 months and could not work. All the Negro slaves had died. The people were nearly desperate because of hunger.

Robelledo, at the beginning of his administration, recommended, as had other governors before him, that work be started immediately upon a stone fort, and he made specific, emphatic recommendations for its accomplishment. The defenses were crumbling, the garrison had degenerated to less than 150 effective soldiers, the physical appearance of the town had deteriorated, the navy had declined to a point where there was hardly a vessel able to make the trip to Havana for provisions, much less any which could engage the English or Dutch in combat. Yet despite the clear warnings of what was in store for Spanish Florida if conditions did not improve, the colonial ministers continued to vacillate, and even when orders were issued to New Spain to pay the situado, many excuses were made for failure to do so. In a word, St. Augustine, slightly less than a century after its founding by Méndez, had been reduced to a shadow of its earlier strength, while military, social and political conditions had reached their lowest ebb. Religious activity in the presidio

continued apace but that was marred by dissension and quarrels between the missionaries on the one hand and the governor on the other, they having accused him of exploiting and torturing the Indians.

Thus it was that Robelledo in his letter to the King on Oct. 24, 1655, predicted that if payments of subsidies for the presidio were not continued, it would perish because of the barrenness of the land. He mentioned his illness and stated that he was "without remedy, for lack of a doctor" to attend him. In 1659, he died in office.

In 1662, a report from the Council of the Indies quoted letters from Robelledo written just before his death and from Aranques y Cotes, the governor who succeeded him, to show the plight of the colony. This report made it known that 10,000 Indians, and many soldiers of the garrison at St. Augustine, had died of the plague (smallpox).

Two events having medical significance occurred at this time which brought about a major change of policy on the part of Spanish authorities concerned with the presidio. The first was the sack and partial destruction of St. Augustine by the English pirate, Robert Searles, in 1668, and the second was the establishment by the English of the first settlement in what is now South Carolina, at Charleston in 1670.

In a decree from Mexico dated Nov. 16, 1668, based largely on a report from Governor Francisco de la Guerra, it was pointed out that while there should have been 300 men in the dotacion of St. Augustine not counting the curate, chaplain of the fort, surgeon, barber, "apothecar," and captains, pilots, sailors and cabin boys of vessels, actually those available for military duty came to only 130, and 25 of these were in the garrison at Apalache. In addition, it was related that a French surgeon, who had served in St. Augustine for six years, wrote and induced the enemy to make the invasion, pointing out that there was a lack of adequate defense for the town. The enemy apparently had seized two Spanish boats off the coast of Cuba, descended without warning, made it appear that a Spanish crew manned each vessel, entered the port at midnight, sacked the presidio "without sparing the main church, the monastery of San Francisco, the hospital and other hermitages," and killed 60 people. Almost everything of value that could be "carried away" was taken to the boats. The pirates then took soundings in the harbor and the inlet and declared that they would return.

With the buccaneer, Searles, as he left the port, there sailed an amazing young doctor named Henry Woodward, who for several months had been imprisoned in St. Augustine under somewhat strange circumstances. Apparently born in the Barbados about 1646, this young "chirurgeon" had accompanied the explorer, "Robert Sandford, Esq. Secretary and Cheife Register," when he sailed from Cape Fear in what is now North Carolina, using a "smaler shallope of some three tonns" and a "vessell whose burden alsoe exceeded 'scarce fiveteen tonns" for a "Voyage of Discovery" farther south to Port Royal in 1666. Sandford wrote: "Henry Woodward . . . had before I sett out assured me his resolucon to stay with the Indians if I thinke convenient . . ." Apparently it was convenient, for when Sandford returned to Cape Fear, he left the young doctor, having first given him "formall possession to the whole country to hold as tennant att will of the right Hono'ble the Lords Proprietors" of Carolina. Woodward remained "some considerable time amongst the natives of those parts being treated with the greatest love and courtesye that their rude natures were acquainted withal, until the Spaniards having notice of his abode at St. Helena carried him thence to St. Augustine. . . ."

There in the little presidio the talented young doctor served as a "willing prisoner." He charmed the Spanish people and ingratiated himself with the authorities, all the while gathering information concerning their customs and storing knowledge of the town's plan and defenses. He lived for a while with the parish priest, professed Catholicism, and served as an official surgeon for the presidio. After he escaped with Searles in 1668, he was shipwrecked at Nevis, but later took passage with the Carolina fleet and not long afterward was back with the Carolinians, this time in the new settlement at Charleston.

Appropriately called "a man of destiny," Dr. Woodward was able so skillfully to use the information concerning the affairs of the Spaniards, as well as his knowledge of the Indians gathered earlier, that he became the leading exponent of the arts and skills of border intrigue and made himself the most influential and powerful person in that province. He seems to have done more than any other Englishman to induce the Indians to sever their allegiance to the Spaniards, and thus almost singlehandedly was responsible for

breaking Spanish control of the Florida frontier.

Distinguished pioneer of South Carolina, Dr. Woodward could doubtless claim as remarkable an assemblage of eminent descendants as any American. The imposing list includes three governors of his state and three attorney generals, four senators and six representatives in the Congress of the United States, two generals and four colonels serving in the War Between the States, two commanders of Fort Sumter in that war, one prominent naval officer of a later period, four judges, four bishops, a noted Baptist minister, a poet, a millionaire philanthropist, the South's most outstanding cotton merchant, an editor of distinction and several authors. Not the least among the authors is one physician, Dr. William Hayne Simmons of St. Augustine, selected as one of a committee of two to locate the capital of Florida in 1822.

Physicians of Florida today salute Dr. Henry Woodward, first citizen of South Carolina. His was a unique role in the medical history of Florida during the early Spanish period.

As a result of these two events, the Castillo de San Marcos was begun in 1672 and was substantially finished 15 years later, in 1687. Thus it was that the stone age was introduced at St. Augustine, converting that bastion from one of the weakest to one of the strongest outposts in the New World. Thereafter, the little town in Northeast Florida assumed a new and more important role in the scheme of imperial defense designed to preserve the West Indies for Spain.

Editor's Note: So much of the medical history of our state would not have been recorded but for the efforts of the late Dr. Webster Merritt of Jacksonville. We are reprinting one of his articles from the August 1962 issue of The Journal and in the coming years, we plan to reprint others so that the young physicians may know of this work.

Historical Data

"It is a pleasant task to rescue from oblivion those who deserve to be eternally remembered," Pliny the Younger tells us. So it is a pleasant task to recreate the barber surgeons of DeSoto's expedition, covering the wounds of their comrades with fat carved from the bodies of slain Indians, or to visit the Governor of St. Augustine with the surgeons of that city begging for more reals to buy food and medicine for their patients. Then, too, there is high entertainment as we listen to the diatribe of the "elderly physician" as he berates Count Odet Phillippi, a charlatan of Key West in 1830, who claimed to have been the chief surgeon of the French Navy under Napoleon Bonaparte. Did you know that the first effective quarantine within our state was enforced at Key West by a shell lobbed from the battleship "Maine" into the path of a defiant tugboat?

Have you heard of the "strangers' fever?" This disease, yellow fever, visited Florida with distressing regularity throughout the nineteenth century, and was the chief bar to the settlement of Florida until the Yellow Fever Commission acting on the suggestions of Dr. Carlos Finlay proved the mosquito vector, thus permitting an intelligent approach to the eradication of the disease.

These and many more interesting tales of Florida medical history we hope to be able to tell in their entirety. Your Florida Medical Association's Committee on Archives has begun a campaign to ferret out such stories, document them, and ultimately produce a volume on the history of the development of medicine in Florida. We need your support. If you know of stories that should be told, or have in your possession material that would be of help to us, please contact the chairman of the Committee on Archives, or Mr. Harold Parham, the Executive Director of the Florida Medical Association, P. O. Box 2411, Jacksonville, Florida 32203. Facilities for photocopying manuscripts, articles, book pages and photographs are available at this address and we will jealously guard any material you submit. After copying them, we will promptly return them to you.

William M. Straight, M.D., Chairman
Committee on Archives
Miami

President's Page

A Timely Resolution

Prosperity doth best discover vice, but adversity doth best discover virtue. . . .

The virtue of prosperity is temperance, the virtue of adversity is fortitude, which in morals is the more heroical virtue.

Francis Bacon

If intelligence can be substituted for adversity, the following resolution by the American Medical Association would be appropriate and timely.

WHEREAS, the traditional principle of physician responsibility for medical care whether provided in the home, office, hospital or clinic has produced in the United States an excellent system of health care unsurpassed in the world today or in history, and

WHEREAS, the continuation of this principle, vital to the preservation of good medical care, is more difficult in today's complex urban industrial environment, and

WHEREAS, there are powerful forces working to institutionalize the practice of medicine by relieving the physician of the responsibility for direction of the medical care system, and

WHEREAS, competence and true charity in medical care can come only from the minds and hearts of men dedicated to the responsibility of providing good medical care, therefore

BE IT RESOLVED that the House of Delegates of the American Medical Association authorize the appointment of a Commission on Responsibility for Medical Care to examine the problems of providing medical care in the present environment; assess the current forces working to assume responsibility for medical care and the ability of the medical profession to organize its efforts to cooperatively fulfill the physician's traditional medical care responsibilities; and consider various methods of improving the quality and availability of medical care for all of the people; and recommend to the House of Delegates principles and methods to aid and guide the modern physician in fulfilling his fundamental responsibility to provide medical care for all with competence and charity.

H. Phillip Hampton

Editorials

Senate Bill 596 and House Bill 3140

Senate Bill 596 and House Bill 3140 have been introduced in the Congress of the United States to implement the President's Commission on Heart Disease, Cancer and Stroke (DeBakey Commission Report). Each involves the physician, the medical school and the hospital. The complete bills comprise many pages. Those portions of most importance to members of the Florida Medical Association are:

1. A network of regional medical complexes now limited to the fight against heart disease, cancer, stroke, and other major diseases is to be associated with a medical school having a teaching hospital as its core, with satellite installations in nearby community hospitals serving as clinical research centers and specialized diagnostic treatment centers.

2. Fifty million dollars is authorized in fiscal 1966 and such amounts as may be necessary for each of the four next fiscal years to establish and operate this system. These funds would cover the entire cost of planning a complex and up to 90% of the cost for installation of and equipment for each complex. Salaries of technicians and specialists who would be involved in the program will be met by government grant. Operational cost will be the responsibility of the medical center or the satellite community hospital.

3. Provisional control will be vested in medical school selected specialists who would direct and control the community hospital stations and instruct the community physician in newer techniques, teaching as they directed patient care.

4. Operational cost of the stations may be billed to the patient after negotiations with some government agency as to the proper scale of billing.

5. The Secretary of Health, Education, and Welfare will appoint an Advisory Council of 13 men to be chaired by the Surgeon General of the Public Health Service to build these complexes and guide their operation.

This plan increases the now great governmental influence exerted upon our medical schools by diverting more federal funds for research and for salaries of professional staff. With acceptance of these funds will necessarily go increasing governmental control.

This plan envisions 550 treatment stations, each associated with a teaching hospital center. Staffing of these stations on a professional level alone will at present be impossible, as there is no such source of well trained specialists equipped to assume such responsibility. With present training programs this manpower need cannot be met in the foreseeable future.

Each community hospital within the state of Florida having an accredited intern and residency training program has at present a well trained devoted group of specialists voluntarily giving their time for house staff training and improved patient care. This group will be bypassed as the program is now planned, and each of us must wonder just what our reaction will be when our voluntary efforts are assumed by a government-subsidized replacement. This group of physicians who are now always present for any teaching or patient care responsibility will naturally lose interest and fade away. In each community there are two groups of people—the one giving, hopefully to improve; the other satisfied within themselves and consequently giving little. The first group will be discouraged, and the second will not be helped, for one must recognize the need for help before help can be given. A subsidized replacement can only produce a decreasing interest in the giving group.

Our medical schools through participation will become tremendous complexes with each disciple at each satellite station spreading the gospel by implication and word that his alma mater is the only place for good medical care, and that the so-called LMD (local medical doctor) is not

quite up to the standard of the medical center and is passé. Indeed, he may well become so with such odds against him.

By this plan the government is projected into the personal care of all patients, for the bill as written states: AND OTHER MAJOR DISEASES . . . SUCH FUNDS AS MAY BE NECESSARY. These open end statements are much broader than the present so-called Medicare bill, for they apply to all people and for all things medical.

We do need better medical care for our patients; we do need continuing education for physicians; and we do want to preserve an independent relationship between doctor and patient.

This bill recognizes our difficulties and is no doubt an honest effort to correct these deficiencies; it simply forgets that among that interested group of physicians—and we have many in Florida—there has been a continuing effort utilizing private or local funds and voluntary manpower to accomplish just what the DeBakey Commission states we need. I believe these efforts are adequate.

Our medical schools have been, and are, cooperating; community hospitals with training programs are receiving an increasing manpower contribution. Professional directors of education are being provided and funds for special service education directors are being obtained. With these efforts, house staff training and patient care are constantly improving.

A positive plan is needed to guide our legislators in voting out a bill, if some such legislation is inevitable, which will utilize proposed funds at a local level to (a) improve communications between the community hospital professional staff and our medical school staff by exchange of residents and teaching personnel; (b) employ full time specialty educators for house staff training, knowing that through this training there will be improved patient care; (c) offer our resident training groups at each level a centrally prepared examination each year to determine the effectiveness of each residency program and to allow the director of each program to know his strength and his weaknesses; (d) encourage the exchange of service teaching personnel between community hospitals, as such visits would allow each to learn from the other and hopefully bring new ideas to the host institution; (e) improve the image of our contributing local medical doctor in the eyes of the nearby teaching institutions and his community by stressing his abilities and achievements rather than to damage this physician by implication.

These suggestions will constitute a start toward a positive approach that will go far to obviate the criticisms of medical care for the average person as advanced by the DeBakey Commission. They will also impose a responsibility upon each physician, for we must increase our efforts at continuing education and our contribution of time and effort devoted to improved patient care if we are to justify our ability to give the best medical care to all.

Think on these things. If we truthfully say we can and will fulfill this responsibility, we should at once arrange a meeting with representatives of our medical schools, State Board of Health, Florida Medical Association, Florida Hospital Association, specialty leaders and our community hospital professional service directors to formulate a positive approach—one we can pridefully cooperate with and which will in the end provide the best possible patient care.

T.M.

News

First award winner in the Scientific Exhibit of the 91st Annual Meeting of the Florida Medical Association at Miami Beach, April 22-25, were Drs. James R. Chandler Jr. and Alan J. Serrins of Miami for their exhibit entitled "Carcinoma of the Larynx." The second award went to the Florida Society of Ophthalmology and Otolaryngology for the exhibit, "Temporal Bone Banks Program," and the third to Drs. Francis L. Merritt Jr. and Frank P. Murphy of Lakeland for their exhibit, "Carpal-Tunnel Syndrome."

The 15th annual Postgraduate Obstetric-Pediatric Seminar is being held on August 19-21 at the Ramada Inn at Cocoa.

The 13th annual Diabetes Seminar has been scheduled for September 30-October 1 at the Roosevelt Hotel in Jacksonville. It is presented by the Florida Diabetes Association and the Florida State Board of Health in cooperation with the University of Florida College of Medicine, the University of Miami School of Medicine and the Jacksonville Hospitals Educational Program.

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FOR RENT: Medical suite, Miami, Florida near Coral Gables. Write L. Lemberg, M.D., 3180 Coral Way, Miami, Fla. Ph. HI 8-6532.

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RADIOLOGIST: needs locum tenens coverage—1 week to 1 month. East Coast Florida. Write 69-645, P.O. Box 2411, Jacksonville, Fla. 32203

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* AMA Council on Foods and Nutrition: The Regulation of Dietary Fat, *JAMA* 181:411-423 (August 4, 1962).
AMA Council on Foods and Nutrition: Composition of Certain Margarines, *JAMA* 179:719 (March 3, 1962).

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COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. of elemental iron in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

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Adverse Effects: Side effects, usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste," sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs.

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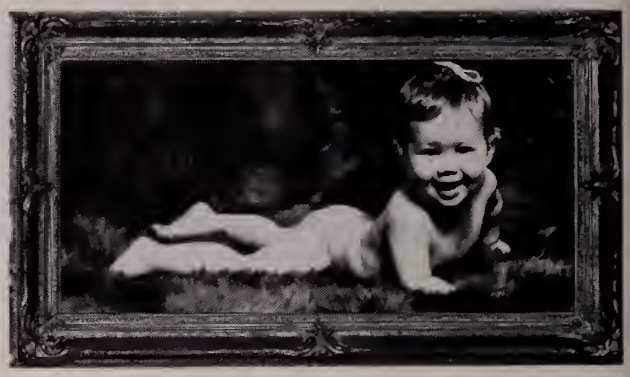

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1—Pomeranze, J., and Gadek, R.J.: Am. Pract. & Digest Treat. *8*:73-77 (Jan.) 1957
2—Asher, L.M.: Am. J. Digestive Diseases *4*:272 (Apr.) 1959

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*Dorhout Mees,E.J.,and Geyskes, G.G.: Acta med.scandinav. 175:703,1964.

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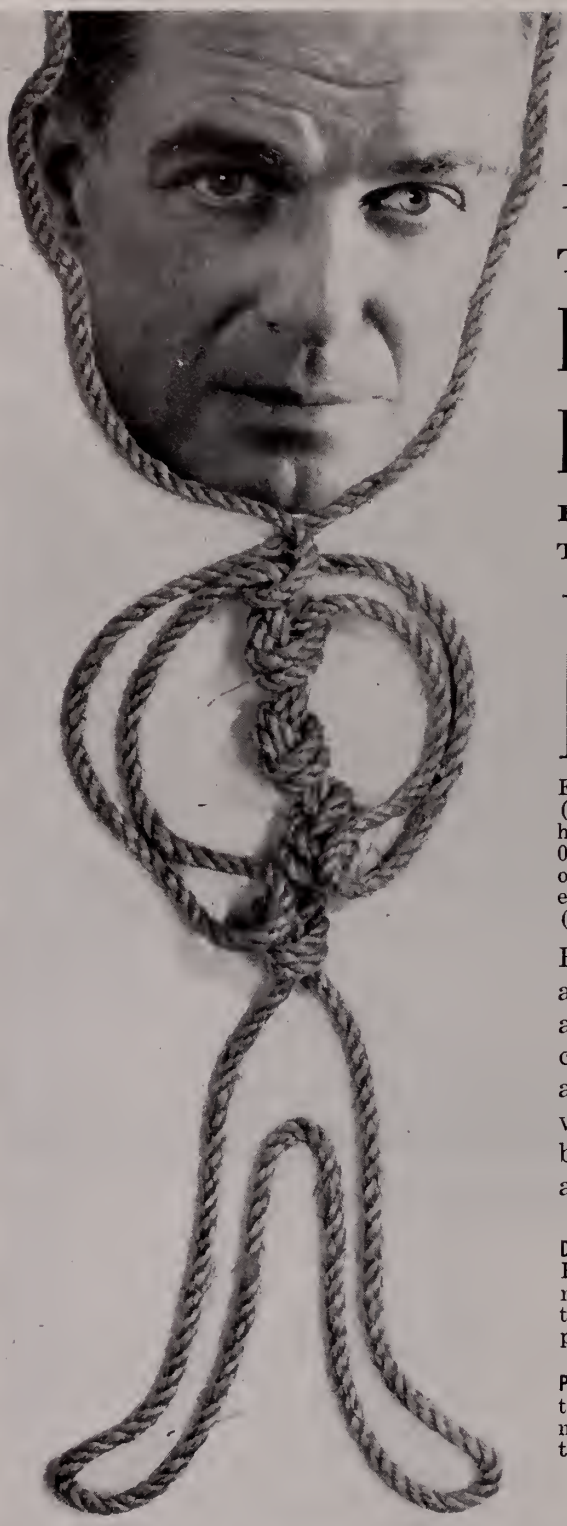

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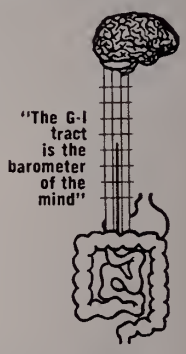

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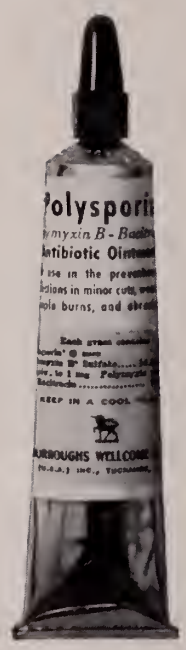

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Vitamin B_1 (Thiamine HCl) ..... 5 mg. (5 MDR)
Vitamin B_2 (as Riboflavin-5-Phosphate Sodium) ..... 2.5 mg. (2-1/12 MDR)
Vitamin B_6 (Pyridoxine HCl) ..... 1 mg.
Vitamin B_{12} ..... 1 mcgm.
Niacinamide ..... 50 mg. (5 MDR)
*Inositol ..... 100 mg.
*Choline (as Tricholine Citrate). 100 mg.
*Pantothenic Acid (as D-Pantothenyl Alcohol)..... 10 mg.
Potassium (from KI and vehicle).. 10 mg.
*Zinc (as $ZnCl_2$)..... 2 mg.
Iodine (as KI) ..... 0.1 mg. (1 MDR)
Magnesium (as $MgCl_2$)..... 2 mg.
Manganese (as $MnCl_2$)..... 2 mg.
†Calcium ..... 48 mg. (1/16 MDR)
†Phosphorus ..... 39 mg. (1/20 MDR)
Iron (as Ferrous Gluconate) ..... 20 mg. (2 MDR)
Alcohol 18%

†Supplied from Calcium Glycerophosphate
MDR—Adult Minimum Daily Requirement
*The need for these substances in human nutrition has not been established.

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Vitamin B_6 (Pyridoxine Hydrochloride) ..... 0.5 mg.
Vitamin C (Ascorbic Acid) .... 75 mg. (2½ MDR)
Niacinamide ..... 18 mg. (1⅘ MDR)
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Elemental Iron (as Ferrous Fumarate) ..... 10 mg. (1 MDR)
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MDR—Adult Minimum Daily Requirement.
Supplied: Jar of 60

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Vitamin B_2 (Riboflavin) ..... 5 mg. (4⅙ MDR)
Vitamin B_6 (Pyridoxine Hydrochloride) ..... 0.5 mg.
Vitamin B_{12} Crystalline..... 1 mcgm.
Vitamin C (Ascorbic Acid) .... 50 mg. (1⅔ MDR)
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Florida Medical Association	H. Phillip Hampton, Tampa	Floyd K. Hurt, Jacksonville	Hollywood, May 11-15,
Florida Specialty Societies			(Specialty Group meetings are scheduled at the time of the annual meeting of the Association)
Allergy Society	Walter L. Schafer, St. Petersburg	George Gittelson, Miami	
Anesthesiologists, Soc. of	Francis M. Coy, Jacksonville	John A. Rush, Jacksonville	
Chest Phys., Am. Coll. Fla. Chap.			
Dermatology, Soc. of	John H. Hicks, Miami	William W. Bruce, Winter Park	
General Practice, Academy	Walter W. Sackett Jr., Miami	C. T. Montgomery, Jacksonville	
Health Officers', Soc. of	T. Paul Haney, Titusville	Charlton Prather, Jacksonville	
Internal Medicine	Kenneth G. Gould, Tampa	Scheffel H. Wright, Miami	
Neurosurgical Society	David H. Reynolds, Miami	Jack W. Barrett, Miami	
Obst. & Gynec. Society	Sam W. Denham, Jacksonville	Davis H. Vaughan, Clearwater	
Ophth. & Otol. Society	Thomas M. Irwin, Jacksonville	Bernard M. Barrett, Pensacola	
Orthopedic Society	George I. Raybin, Jacksonville	Leon H. Mims Jr., Coral Gables	
Pathologists, Society of	Sanford A. Mullen, Jacksonville	Laudie F. McHenry, Melbourne	
Pediatric Society	George W. Griffin, Orlando	Oliver F. Deen Jr., Tampa	
Phys. Med. & Rehab., Fla. Soc.	Arthur J. Pasach, Tampa	Geo. A. Cunningham, Delray Bch.	
Plastic & Reconstr. Surg.	William M. Douglas, Orlando	J. M. Hamilton, St. Petersburg	
Proctologic Society	John J. Cheleden, Daytona Beach	John T. McCormick, Jacksonville	
Psychiatric Society	Walter H. Wellborn, Tarpon Spgs.	William C. Ruffin Jr., Gainesville	
Radiological Society	Marvin V. McClow, Jacksonville	Andre S. Capi, Ft. Lauderdale	
Surgeons, Am. Coll., Fla. Chap.	Robert F. Dickey, Miami	Harry W. Reinstine Jr., J'ville	
Surgeons, Int. Coll., Fla. Chap.			
Surgeons, General, Fla. Assn.	Emmett F. Ferguson Jr., J'ville	Jesse W. Castleberry, Orlando	
Urological Society	Robert J. Brown, Jacksonville	Carey N. Barry, Ft. Myers	
FLORIDA			
Basic Science Exam. Board	Paul A. Vestal, Winter Park	Theodore A. Ashford, Ph.D. P.O. Box 17236, Tampa 12	Tampa, Nov. 6, 1965
Blood Banks, Association	Leo E. Reilly, St. Petersburg	Catherine Macaluso, St. P'burg	Jacksonville, 1966
Blue Cross of Florida, Inc.	C. Dewitt Miller, Orlando	H. A. Schroder, Jacksonville	November 1965
Blue Shield of Florida, Inc.	W. Dean Steward, Orlando	John T. Stage, Jacksonville	Hollywood, May 11-15,
Cancer Council	Earl E. Wilkison, Tallahassee	James E. Fulghum, J'ville	Fall of 1965
Diabetes Association	James E. Fulghum, Jacksonville	Matthew E. Morrow, J'ville	Jacksonville, Oct. 1, '65
Dental Society, State	Louis J. Atkins, Blountstown	Fred E. Hasty Jr., Coral Gables	Miami Beach, May 22-2
Heart Association	Carl M. Voyles, St. Petersburg	Mrs. Michael Kwasin, Pensacola	Miami, May 6-8, '66
Hospital Association	Samuel Gertner, Miami Beach	L. R. Jordan, Gainesville	November 1965
Board of Medical Examiners	George H. Garmany, Tallahassee	Leo Grossman, M.D. 2900 North Bay Rd., Miami 40	Jacksonville, Nov. 21-23
Pharmaceutical Assn., State	Felix Donatelli, Lakeland	R. Q. Richards, Ft. Myers	Jacksonville, May 15-18,
Public Health, Association	C. L. Brumback, W. Palm Beach	Miles T. Dean, Jacksonville	Clearwater, Oct. 2-9, '6
Thoracic Society	David M. Travis, Gainesville	Nelson H. Kraeft, Tallahassee	Jacksonville, Apr. 1-2, '(
Tuberculosis & Res. Dis. Assn.	R. G. Riechmann, Jacksonville	Mrs. D. Milberger, Gr. Cove Spgs.	Jacksonville, Apr. 1-2, '(
Woman's Auxiliary	Mrs. H. Quillian Jones, Ft. Myers	Mrs. R. F. Boudreau, Ft. Myers	Hollywood, May 11-15,
American Medical Association	James Z. Appel, Lancaster, Pa.	F. J. L. Blasingame, Chicago	Chicago, June 26-30, '6(
A.M.A. Clinical Session			Las Vegas, Nov. 27-30,

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**Branford, Gilchrist, Union*					
Bay	John L. Fishel, Panama City	Malcolm M. Traxler, Panama City	1st Tues.	0	36
Brevard	Benjamin F. Knotts Jr., Cocoa Beach	William F. Addington, Cocoa Beach	1st Tues.	5	130
Broward	Robert H. Pfeifer, Ft. Lauderdale	Henry D. Perry, Hollywood	4th Tues.	47	367
Charlotte	Carl N. Reilly, Punta Gorda	Charles M. Wilson, Port Charlotte	2nd Tues.	2	10
Clay	John M. Malone, Green Cove Springs	Aubrey Y. Covington, Green Cove Springs		0	9
Collier	Louis S. Moore, Naples	Ethel H. Trystad, Naples	3rd Wed.	0	18
Columbia	Barney E. McRae Jr., Lake City	John T. Wilson, Lake City	3rd Wed.	1	13
**Baker*					
Dade	Richard M. Fleming, Miami	Chester Cassel, Miami	1st Tues.	174	1,276
DeSoto-Hardee-Glades	Barbara C. Carlton, Wauchula	Grant P. Carmichael, Wauchula	1st Tues.	0	16
Duval	G. Dekle Taylor, Jacksonville	John H. Terry, Jacksonville	1st Tues.	38	390
Escambia	Earl G. Wolf, Pensacola	Donald McMahon Jr., Pensacola	2nd Tues.	2	130
Franklin-Gulf	J. Wayne Hendrix, Port St. Joe	Harold B. Canning, Wewahitchka	Last Wed.	0	5
Gadsden-Liberty	Taylor W. Griffin, Quincy	George H. Massey, Quincy	Quarterly	0	14
Highlands	Howard V. Weems, Sebring	Augustus H. Foster Jr., Sebring	3rd Mon.	2	17
Hillsborough	W. Mahon Myers, Tampa	Frank A. Massari, Tampa	1st Tues.	6	315
Indian River	James C. Robertson, Vero Beach	E. B. Hardee Jr., Vero Beach	2nd Tues.	1	19
Jackson-Calhoun	James T. Cook, Marianna	Francis M. Watson, Marianna	Quarterly	0	18
Lake	Argin A. Boggus Jr., Tavares	Frederick C. Hester III, Eustis	1st Mon.	2	39
Lee-Hendry	Frank M. Bryan, Ft. Myers	Orville E. Blank, Ft. Myers	3rd Mon.	13	54
Leon-Wakulla-Jefferson	James K. Conn, Tallahassee	Stuart C. Smith, Tallahassee	1st Mon.	7	78
Madison	Julian M. DuRant, Madison	A. Franklin Harrison, Madison	1st Tues.	1	6
Manatee	C. Sumner Quimby, Bradenton	Albert C. Knowles, Palmetto	2nd. Tues.	4	54
Marion	Alexander Goulard Jr., Ocala	West Bitzer, Ocala	3rd Tues.	6	40
**Levy*					
Monroe	William R. Ploss, Key West	John L. Ingham, Key West	1st Thurs.	3	21
Nassau	Cecil B. Brewton, Fernandina Beach	John B. Britton, Fernandina Beach	2nd Thurs.	4	8
Okaloosa	Eugene R. Celano, Fort Walton Beach	Henry I. Langston, Fort Walton Beach	1st Wed.	0	22
Orange	Truett H. Frazier, Orlando	Duane C. Deen, Orlando	3rd Wed.	36	305
**Osceola*					
Palm Beach	David W. Martin, West Palm Beach	Bernard Kimmel, West Palm Beach	4th Mon.	34	256
Pasco-Hernando-Citrus	Karl T. Humes, Bushnell	W. Wardlaw Jones, Dade City	2nd Thurs.	2	25
**Sumter*					
Pinellas	C. Gibson Hooten, Clearwater	Abbott Y. Wilcox Jr., St. Petersburg	1st Mon.	74	367
Polk	Albert G. King Jr., Lakeland	Shelton T. Bass, Lakeland	2nd Wed.	20	164
Putnam	James A. Long Jr., Palatka	James R. Sayers, Palatka	2nd Tues.	1	14
St. Johns	William W. O'Connell, St. Augustine	Kenneth J. Farrow, St. Augustine	3rd Tues	0	20
St. Lucie-Okeechobee-Martin	Russell L. Counts, Fort Pierce	George Theodorou, Fort Pierce	3rd. Thurs.	1	44
Santa Rosa	Claude J. Barnes, Milton	William N. Watson, Milton		3	13
Sarasota	T. Vernon Finch, Sarasota	Fred J. Swartzendruber, Sarasota	2nd Tues.	15	110
Seminole	Robert M. Rosemond, Sanford	William C. Rape, Sanford	2nd. Tues.	1	24
Suwannee-Hamilton-Lafayette	Hugo F. Sotolongo, Live Oak	Frederick T. Mickler, Live Oak	1st Sat.	0	7
Taylor	James A. Rawls, Perry	John A. Dyal Jr., Perry	Last Fri.	0	6
**Dixie*					
Volusia	Herbert A. King, Daytona Beach	Charles L. Rickerd, Daytona Beach	2nd Tues.	6	120
**Flagler*					
Walton	McKinley Cheshire Jr., DeFuniak Springs	Howard F. Currie, DeFuniak Springs	3rd Tues.	0	7
Washington-Holmes	John T. Grace, Bonifay	Jimmy F. Henry, Chipley	Quarterly	0	5
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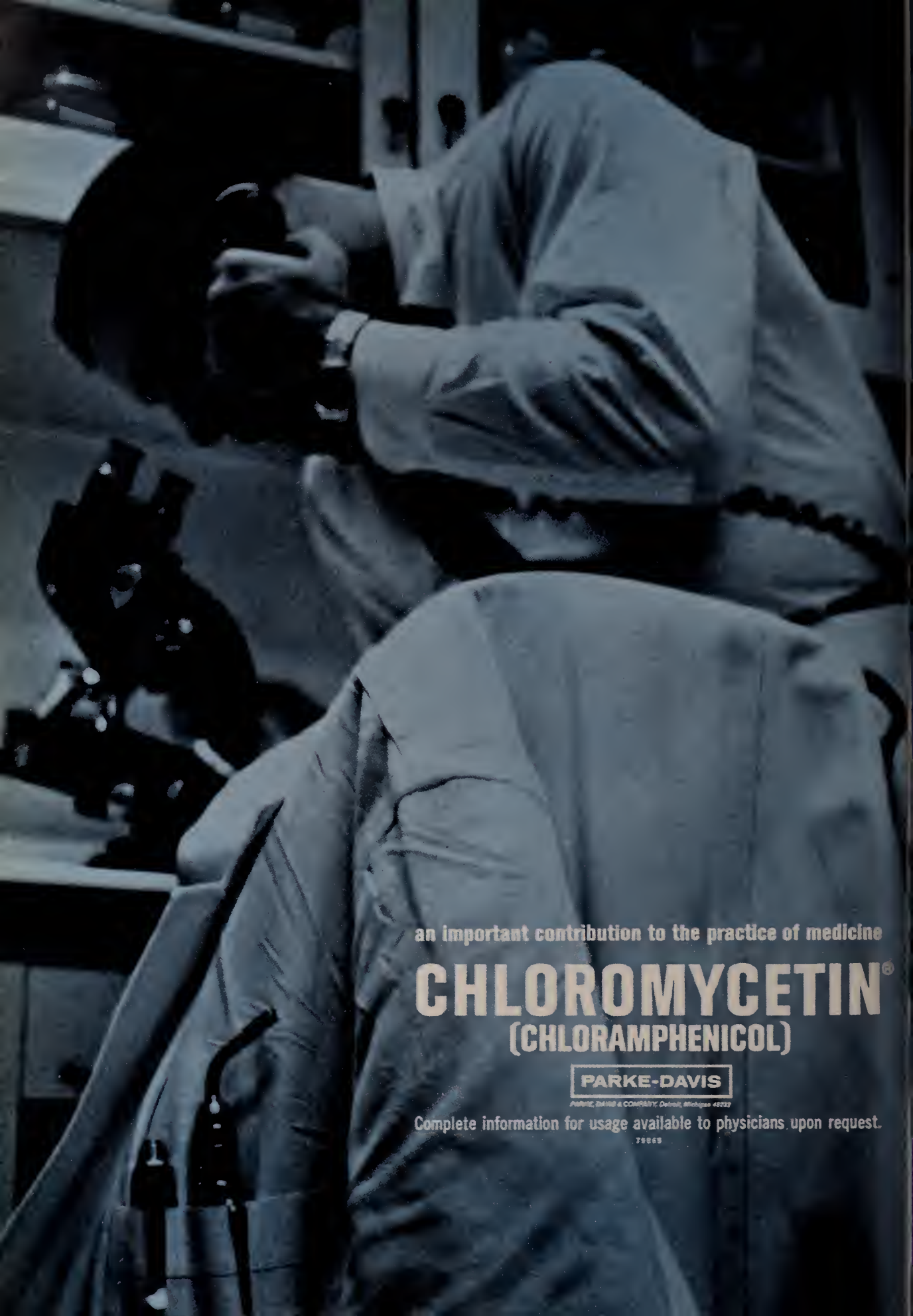
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(1) Frykman, H.M.: Minn. Med., Vol. 38, Jan. 1955. (2) Poth, E.J.: The J.A.M.A., Vol. 163, No. 15, April 13, 1957. (3) McGivney, J.: Texas State Jour. of Med., Vol. 51, No. 1, Jan. 1955. (4) Stern, F. H.: Jour. of The Amer. Ger. Soc., Vol. 11, No. 3, Mar. 1963. (5) Weekes, D. J.: N.Y. State Jour. of Med., Vol. 58, No. 16, Aug. 1958. (6) Abbott, P.L.: Jour. of Oral Surg., Anes. & Hosp. Dental Serv., Vol. 19, July 1961. (7) Weekes, D. J.: E.E.N.T. Digest, Vol. 25, No. 12, Dec. 1963.

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Volume 52, Number 8, August 1965

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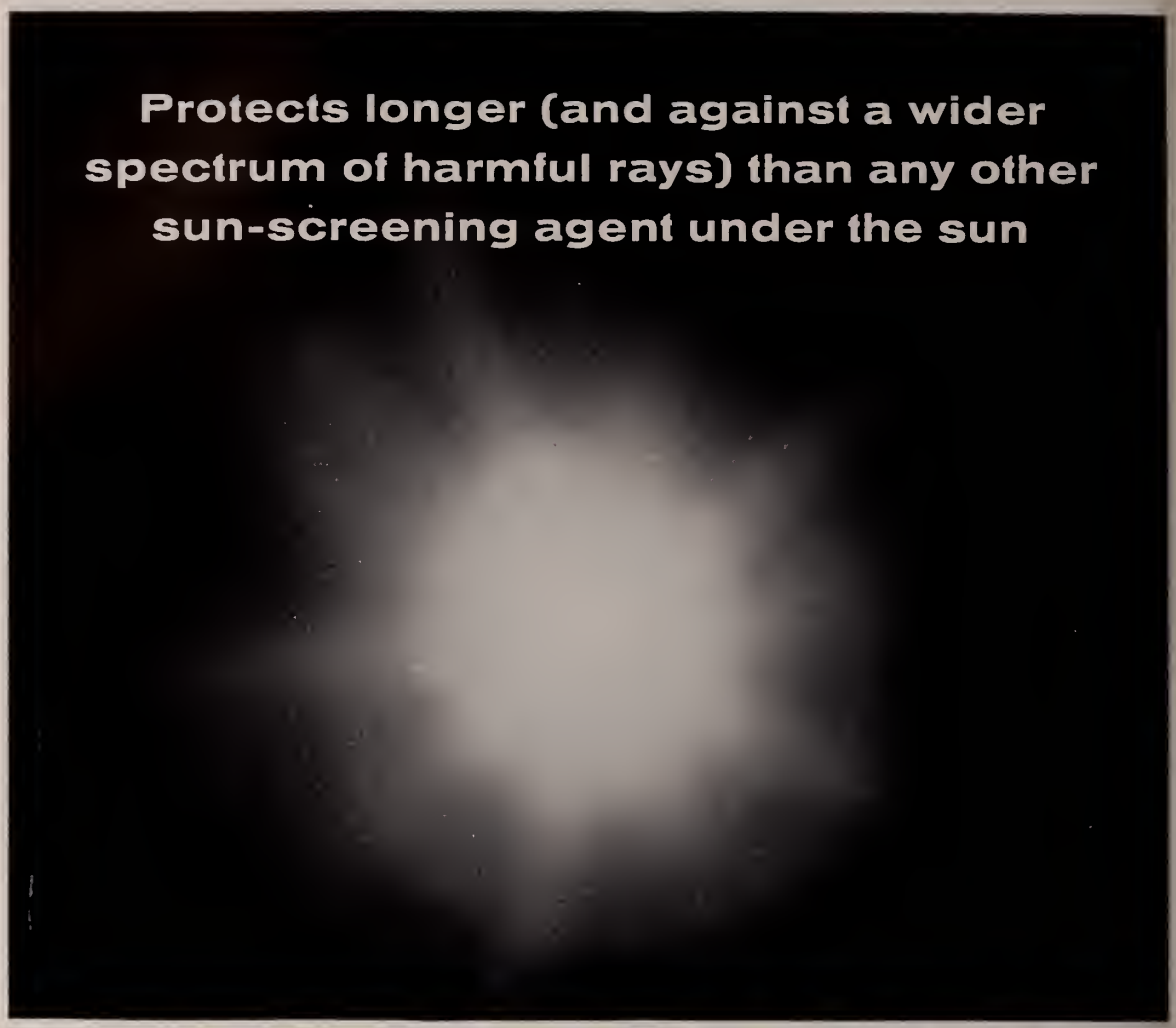

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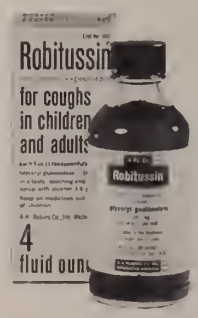

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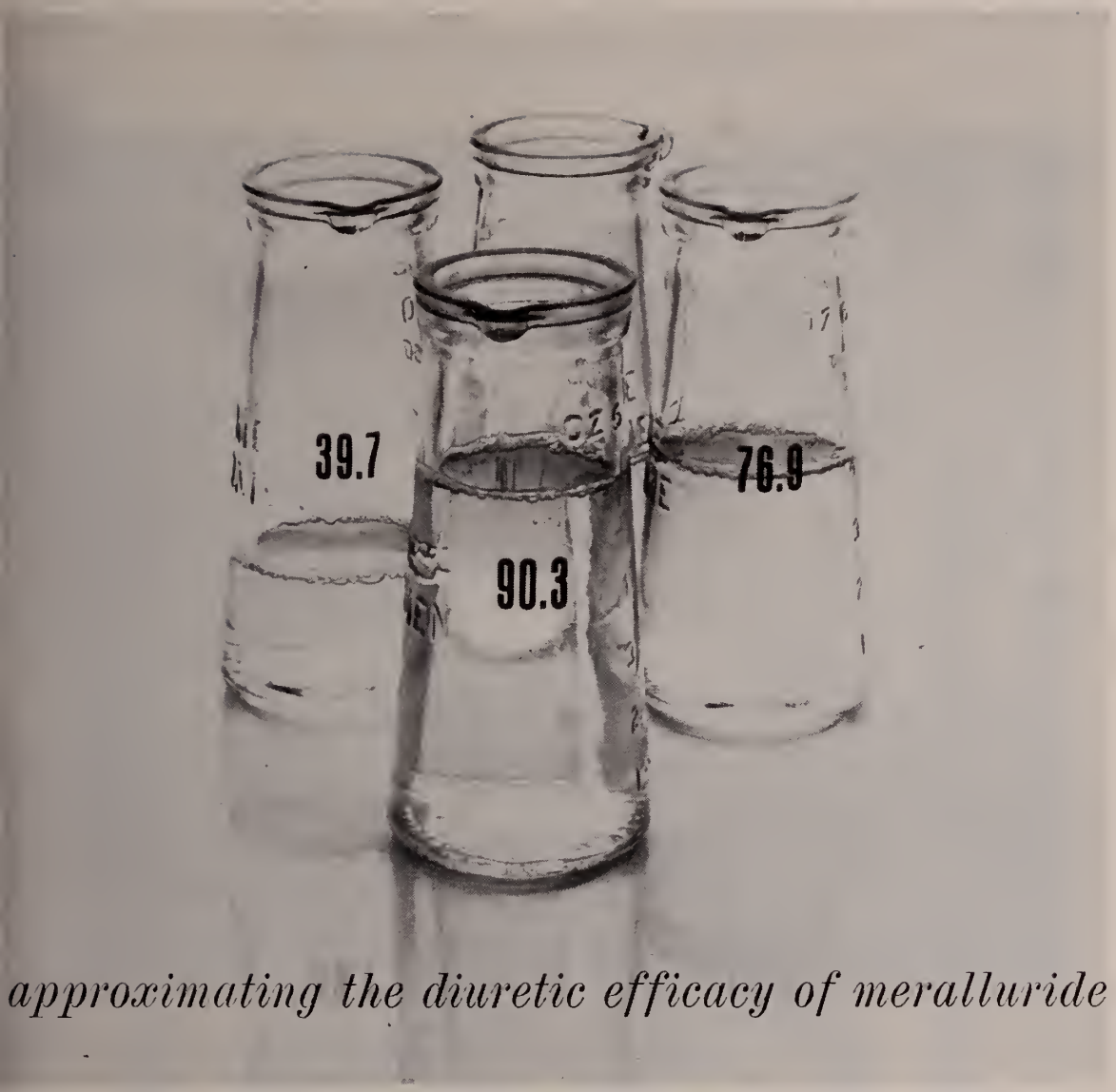

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*Gold, H., *et al*: Closed Panel Conference: Present Status of the Management of Congestive Failure and Advances in Diuretic Therapy, Journal of New Drugs, 1:177, July-August, 1961.

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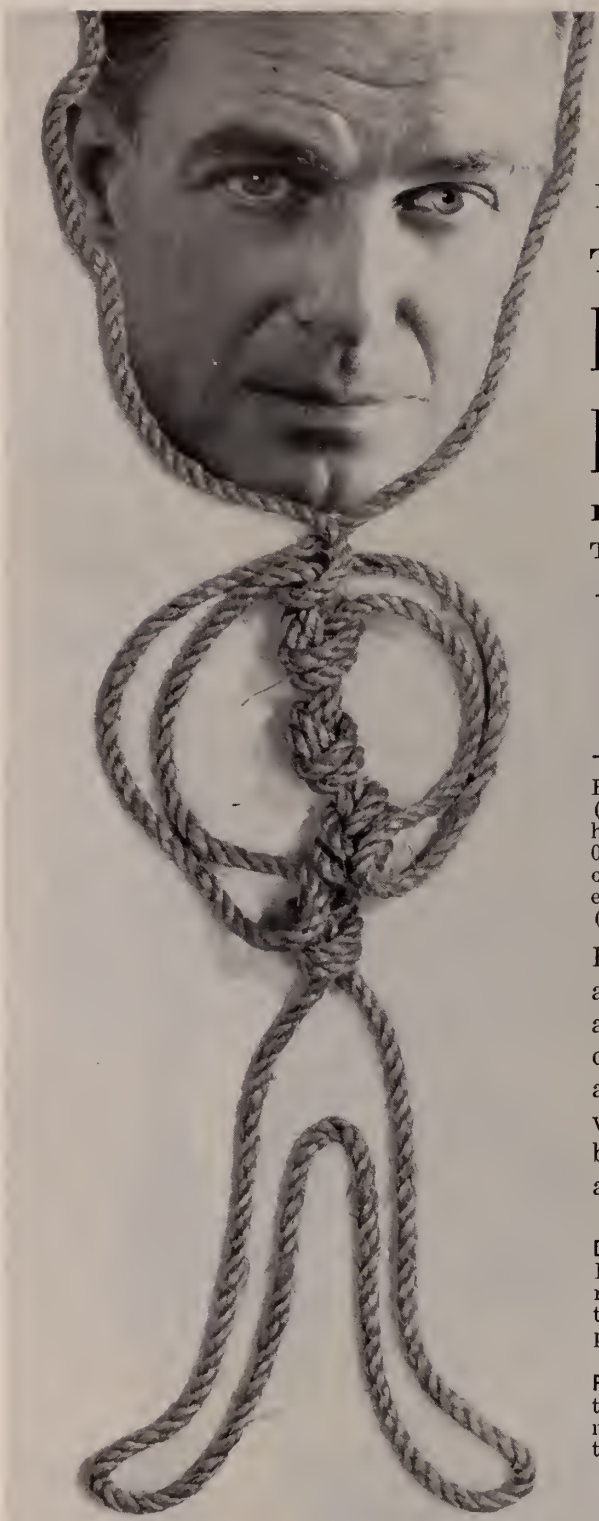

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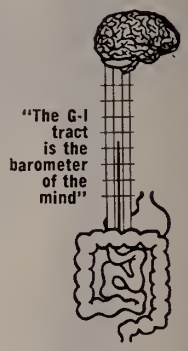

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*Dorhout Mees,E.J.,and Geyskes, G.G.: Acta med.scandinav. 175:703,1964.

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A Controlled Short Term Evaluation of the Antihypertensive-Diuretic Agent, Chlorthalidone, in the Management of Hypertension

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TAMPA

The antihypertensive-diuretic agents act by decreasing the concentration of sodium in the vascular smooth muscle during the process of diuresis. In the hypertensive patient, this action appears to reduce blood vessel reactivity to vasoconstrictive substances, with a consequent fall in both systolic and diastolic blood pressure.[1,2]

Among the newer oral sulfonamide compounds, chlorthalidone (Hygroton)* has been shown to be an effective antihypertensive agent.[3-7] In contrast to the thiazides, it is a phthalimidine derivative with a sulfamyl side chain. Its distinctive attribute is a prolonged duration of action associated with few side effects. In addition, the sustained, consistent action occurs with comparatively low doses even when given only once every 24 or 48 hours. The purpose of this study was to test the effectiveness of chlorthalidone in the control of significant diastolic hypertension.

Material and Methods

For this single-blind study, 94 patients referred to the hypertension clinic at the Hillsborough County Hospital were screened. All were started on placebo medication. Of these, 55 attended irregularly or after several weeks on the placebo failed to satisfy our minimal criteria for inclusion in the study, and were discarded. The 39 remaining were started on the active drug after a satisfactory base line on placebo medication was achieved. Of these, 11 were discarded because of unsatisfactory attendance and the 28 remaining patients composed our study. Sufficient screening tests were performed so that most of the patients could be reasonably labeled as having "essential" hypertension; several patients were accepted for study, however, with a modest elevation of blood urea nitrogen.

Of the patients included in the study, two had control diastolic pressures between 140 and 150 mm. Hg, two had control diastolic pressures between 130 and 139, five between 120 and 129, eight between 110 and 119, and 10 between 100 and 109 mm. Hg. A single patient who had only systolic hypertension at a remarkably constant level of 206/86 mm. Hg was also studied, but is not included in our analysis of patients with diastolic hypertension. Three patients were white (one male and two female) and 24 were colored (6 male and 17 female). The patient with lone systolic hypertension was also a colored woman.

From the Cardiology Center, Tampa General Hospital, Tampa, Fla.

*Hygroton, 3-hydroxy-3-(4-chloro-3-sulfamylphenyl) phthalimidine, brand of chlorthalidone, Geigy Pharmaceuticals, Ardsley, N. Y.

All patients were initially placed on placebo tablets identical with 50 mg. tablets of the active material. One tablet was given daily until a relatively stable base line was obtained. The active substance was then substituted in a dose of 50 mg. daily. If on this dosage a satisfactory response was obtained, the patient was maintained on it for from eight to 12 weeks. If the response was not satisfactory, or if it was thought that a higher dose might achieve a more gratifying fall in blood pressure, dosage was increased after two to seven weeks to 100 mg. daily. Further increases to 150 mg. and/or 200 mg. daily were usually made in an effort to obtain a maximal response. Thirteen patients received the maximal dosage of 200 mg. daily, five received 150 mg. and six received no more than 100 mg. daily (table 1). If no significant decline in diastolic blood pressure was observed after four to 11 weeks on 200 mg. daily, that is, after a total period of 10 to 21 weeks on the active drug, a failure was accepted. If on the other hand significant depression of the blood pressure was observed, a second period on identical placebo tablets was instituted at the same dosage level (one, two, three or four tablets daily) that had been reached on the active drug. The placebo was continued until a definite upward trend in the blood pressure was established, not necessarily until the pressures returned to their former levels.

The second period on placebo tablets was employed for several reasons: (1) to reconfirm in reverse the efficacy of the active drug; (2) to exclude the possibility that the fall in pressure was coincidental and would have occurred at that time independent of the drug; (3) to exclude the possibility that the fall in blood pressure was related to psychic factors such as increasing confidence on the part of the patient and improving rapport with the staff; (4) to gain some knowledge of the duration of action of the drug; and (5) to provide a further period of correlation between weight and level of blood pressure.

All patients were seen at weekly or biweekly intervals, with rare exceptions for specific reasons. During the second period on placebo medication, especially when pressures were slow to rise, visits were sometimes spaced at longer intervals. At each visit every patient was weighed on balance scales. Because blood pressure determinations are subject to so many variables, including variation between observers, especially if the same meticulous technique is not scrupulously observed, we made every effort to reduce such variables to a minimum. Patients were seated quietly for a minimum of 15 minutes before readings were obtained. At each visit four readings were made with a mercury manometer at intervals of a few minutes and the mean of these four readings was recorded as the day's pressure. The point of maximum change was taken as the diastolic reading; when this was not recognizable, the point of disappearance of sound was recorded. Especial attention was paid to details that are important for accurate and comparable records: the patient's same arm was used for all readings at all visits, cuffs were applied snugly, and the mercury column was allowed to fall past systolic and diastolic end points at a maximum rate of 2 mm. per heart beat. We personally made at least 95% of all the readings in the entire study and occasionally cross-checked each other's readings.

Although the diastolic blood pressure, quite rightly, is the more generally heeded pressure, there is no question that depression of high systolic pressures is also of clinical importance. In assessing the response to medication, therefore, account should be taken of significant lowering of systolic as well as diastolic pressures. The most satisfactory formula for accomplishing this objective is to grade responses according to the fall in mean blood pressure (that is, systolic plus diastolic pressure divided by two), but at the same time to impose a minimum satisfactory fall in diastolic pressure. We have regarded a mean fall of 15 mm. Hg or more, provided the diastolic fall is at least 10 mm., as the minimal satisfactory response. Thus a systolic fall of 10 accompanied by a diastolic fall of 20 mm. Hg or a diastolic fall of 10 accompanied by a systolic fall of 20 mm. Hg would each fulfill minimum requirements.

During the entire period of the study, no other antihypertensive or diuretic therapy was administered to any patient. If maintenance digitalis was being taken, this was left undisturbed. No potassium supplements were administered.

Electrocardiograms were taken and serum electrolyte concentrations (sodium, potassium and chloride), blood urea nitrogen, and serum uric acid were determined on 26 of the 28 patients immediately before and again immediately after the period on active medication.

Results and Discussion

Our results in the 28 patients remaining for analysis after defaulters were eliminated are out-

Table 1

Patients	Race and Sex	Mean Base Line Blood Pressure on Placebo Tablets		Mean Blood Pressure on 50 Mg. Daily	Mean Blood Pressure on 100 Mg. Daily	Mean Blood Pressure on 150 Mg. Daily	Mean Blood Pressure on 200 Mg. Daily	Mean Blood Pressure At Last Two Readings on Active Drug	Fall in Blood Pressure On Drug	Fall in Mean Blood Pressure	Weight Change In Lbs. on Drug	Maximum Dosage/Day	Maximum Return Of Blood Pressure on Repeat Placebo	Weeks on 2nd Placebo	Mean Weight on Initial Placebo	Mean Weight on Drug (last 3 wks)	Weight At Time Of Resurgence	Success, Failure, Or Incomplete
1	CF	258/147	(2)	158/111	201/120	147/109	154/107	145/102	113/45	79	+4	200	228/133	8	167	171	174	S
2	CF	234/143	(2)	239/140	242/144	– – – –	222/138	219/138	15/5	10	–3	200	239/145	7	252	249	250	F
3	CF	195/138	(3)	147/116	131/106	125/104	– – – –	125/103	70/35	52	+6	150	162/116	6	170	176	185	S
4	CF	206/133	(4)	212/122	185/111	– – – –	– – – –	185/111	21/22	21	–2	100	248/163	7	260	258	253	S
5	CF	211/123	(3)	192/113	188/105	– – – –	– – – –	188/105	23/18	20	+1	100	205/113	7	178	179	176	S
6	WF	239/122	(2)	213/109	191/106	179/100	186/109	185/111	54/11	32	+5	200	228/125	9	174	179	181	S
7	CM	196/121	(3)	119/84	– – – –	– – – –	– – – –	108/86	88/35	61	–9	50	– – – –	—	134	125	122	I
8	CM	184/121	(3)	176/119	162/112	158/108	167/116	167/117	18/4	11	–11	200	190/125	9	182	171	174	F
9	CF	200/120	(3)	193/111	161/101	148/95	– – – –	152/99	48/21	34	–½	150	216/121	6	120½	120	124	S
10	CM	202/116	(3)	199/120	179/120	176/114	163/114	155/109	47/7	27	–1	200	170/114	11	146	145	148	F
11	CF	179/116	(3)	143/101	133/97	– – – –	130/96	130/95	49/21	35	–10	200	174/123	5	163	153	156	S
12	CF	183/115	(2)	162/111	168/108	167/108	158/103	146/97	37/18	27	–1½	200	171/112	6	302	300½	309	S
13	CM	187/113	(3)	159/105	153/101	153/99	146/95	152/97	35/16	25	–9	200	178/107	5	149	140	145	S
14	CF	164/113	(8)	166/122	145/113	143/108	– – – –	139/108	25/5	15	–9	150	162/123	10	290	281	288	F
15	CF	175/113	(3)	157/105	142/100	142/100	148/102	151/101	24/12	18	–7	200	191/120	7	221	214	217	S
16	CF	181/112	(3)	149/101	135/99	127/92	– – – –	125/92	56/20	38	–10½	150	189/119	4	167	156½	160	S
17	WF	200/111	(3)	173/95	188/96	175/91	180/92	173/87	27/24	25	+3	200	205/107	3	92	95	95½	S
18	CF	181/109	(3)	139/94	137/93	132/95	– – – –	137/96	44/13	28	–1½	150	176/113	8	196½	195	205	S
19	CM	199/108	(3)	200/111	180/97	180/99	170/94	153/89	46/19	32	+2½	200	194/104	6	175½	178	182	S
20	CF	154/108	(5)	148/108	123/90	– – – –	– – – –	120/88	34/20	27	–10	100	– – – –	—	194	184	—	I
21	CM	238/107	(3)	187/91	172/90	– – – –	156/82	149/81	89/26	57	–4	200	231/111	3	130	126	135	S
22	CM	180/106	(5)	155/99	142/92	– – – –	– – – –	142/91	38/15	26	–9	100	190/102	32	206	197	197	S
23	CF	203/105	(3)	172/91	– – – –	– – – –	– – – –	162/89	41/16	28	–4	50	202/112	3	239	235	241	S
24	WM	149/105	(3)	115/86	– – – –	– – – –	– – – –	115/86	34/17	25	–10	50	142/108	10	188	178	178½	S
25	CF	200/104	(4)	177/97	158/85	– – – –	– – – –	142/81	58/23	40	–4	100	– – – –	—	128	124	126	I
26	CF	167/103	(4)	134/97	126/93	– – – –	– – – –	126/89	41/14	27	–6	100	191/112	4	213	207	213	S
27	CF	157/102	(3)	137/93	138/100	133/92	133/98	135/100	22/2	12	–25	200	171/112	18	145	120	132	F
28	CF	206/86	(2)	144/65	– – – –	– – – –	– – – –	132/59	74/27	50	–6	50	211/81	16	141	135	139	S

lined in table 1. Cases are arranged in the table in descending order of base line diastolic pressures; the figure in parentheses following each of these base line readings indicates the number of weekly visits incorporated in the mean figure.

Of the 27 patients for study with diastolic hypertension, three (7, 20, 25) were eliminated from our final analysis because a resurgence of blood pressure during the second course of placebo medication was not achieved. All three enjoyed a marked decline in blood pressure on active medication and, judging from the almost universally favorable response in the other patients with confirmatory resurgences, probably represented therapeutic successes. They defaulted, however, before their pressures had rebounded on placebo medication and so must be excluded.

Of the remaining 24 patients, 19 (79%) achieved a fall in mean blood pressure of 18 mm. Hg or more, all of whom had a diastolic fall of 11 mm. or more. These 19 "successes" were all unknowingly transferred to a second course of placebo medication and all showed a definite resurgence of blood pressure after intervals varying from three to 32 weeks. The progress of four representative patients is graphically presented in figure 1.

Relationship to Diuresis.—It is noteworthy that a depression of blood pressure was not necessarily correlated with a fall in weight. In

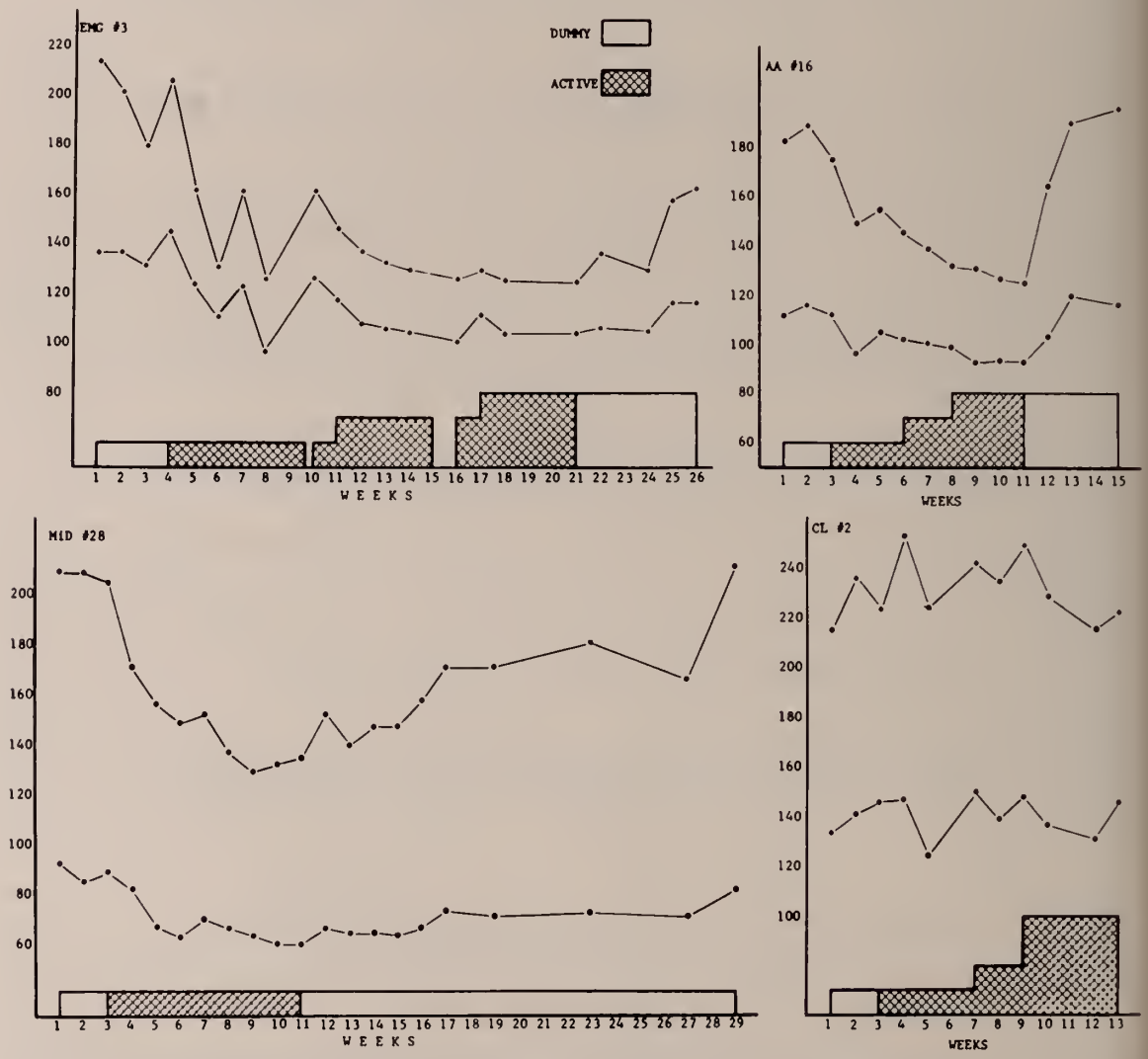

Fig. 1.—Graphs depicting progress of four selected patients. Upper left: patient with severe diastolic hypertension responding to chlorthalidone with significant resurgence of blood pressure on second course of placebo. Upper right: patient with moderate diastolic hypertension showing satisfactory response followed by resurgence. Lower left: patient with lone systolic hypertension showing marked reduction in systolic and diastolic pressures with subsequent resurgence. Lower right: patient with severe hypertension not responsive to full doses of chlorthalidone.

fact the five "failures," who failed to achieve the required minimum reduction in blood pressures, lost from 1 to 25 pounds; and, although 13 of the 19 "successes" assuredly lost from ½ to 10½ pounds, the remaining six gained between 1 and 6 pounds while on the active medication. This frequently observed dissociation between weight and blood pressure responses confirms the impression that the depressor effect of the drug is independent of its diuretic properties.

Blood Chemistry.—Twenty-six patients had blood chemical determinations made at the time of starting active medication and again at the time of discontinuing it. The electrolytes sodium, potassium and chloride showed a definite and expected trend downwards, while blood urea nitrogen and serum uric acid showed a definite increase (tables 2 and 3).

Electrocardiograms. — Twenty-six patients had electrocardiograms taken at the time of starting active medication and again at the end of the active course. No significant differences between their two tracings were seen in 24 patients. One patient (3), when her blood pressure was 206/145 mm. Hg at the time she started on the active drug, showed signs of early left ventricular "strain" (low T-waves and frank U-wave inversion); four months later, at the end of her course on active medication, her blood pressure was 125/104 mm. Hg and her electrocardiogram was entirely normal. A second patient (7) showed definite improvement in T-wave amplitude when his blood pressure had dropped from 182/120 to 106/86 mm. Hg after his three month course on active medication.

Side Effects.—No side effects definitely attributable to the drug were observed in any patients. The only complaints that may have been drug-related were as follows: One patient (2), without an associated fall in blood pressure, de-

Table 2

Patients	Sodium mEq/L Before	Sodium mEq/L After	Potassium mEq/L Before	Potassium mEq/L After	Chloride mEq/L Before	Chloride mEq/L After	BUN mg./100 ml. Before	BUN mg./100 ml. After	Uric Acid mg./100 ml. Before	Uric Acid mg./100 ml. After
1	144	130	5.0	4.4	96	110	15	25	3.6	5.0
2	137	137	4.5	4.2	106	95	26	43	6.0	9.5
3	145	134	4.7	3.9	108	103	17	14	5.6	6.4
4	132		4.3		106		14		4.4	
5	138		4.8		96		21		6.4	
6	145	146	4.3	4.8	102	102	27	31	7.2	3.8
7	148	137	4.9	4.5	110	102	17	25	4.1	5.2
8	146	140	5.6	4.0	107	105	34	43	7.0	10.4
9	148	137	4.7	4.2	103	104	11	18	4.1	4.7
10	136	150	5.3	4.8	103	109	32	44	8.5	7.9
11	139	142	4.2	2.9	94	95	13	17	4.3	7.6
12	143	143	3.9	4.5	102	95	14	14	6.1	9.0
13	139	141	3.8	4.9	100	99	15	16	6.1	8.0
14	145	144	4.9	4.0	97	98	12	13	5.0	7.6
15	142	152	5.2	3.9	100	100	11	20	7.0	8.9
16	136	146	4.8	3.3	110	96	17	21	5.0	9.5
17	165	160	3.3	2.3	105	93	14	14	3.9	2.7
18	143	139	3.9	3.5	102	98	25	16	5.8	4.1
19	140	140	4.9	4.5	108	106	26	30	8.3	8.5
20	140	129	5.0	5.0	102	94	17	19	5.3	7.8
21	139	137	4.7	4.1	107	96	12	18	5.1	5.5
22	143	144	4.7	4.6	109	104	21	29	6.8	7.2
23	141	136	5.9	6.4	110	106	13	24	7.8	8.3
24	142	145	4.6	4.2	115	96	12	14	8.6	9.6
25	150	137	4.3	4.2	108	105	27	28	5.0	7.6
26	145	136	4.6	3.9	98	97	11	24	5.0	7.9
27	140	139	5.2	4.1	104	100	16	20	6.2	3.3
28	140	134	4.3	3.7	107	94	14	19	4.3	7.0

Table 3. — Blood Chemical Changes Associated with Administration of Active Drug

	Number of Patients Showing Increase	Range of Increase	Number Unchanged	Number Showing Decrease	Range of Decrease	Mean Change
Sodium	8	1-14 mEq./L	3	15	1-14 mEq./L	−2.54 mEq./L
Potassium	4	0.5-1.1 mEq./L	1	21	0.1-1.6 mEq./L	−0.48 mEq./L
Chloride	5	1-14 mEq./L	2	19	1-14 mEq./L	−3.9 mEq./L
Blood urea nitrogen	22	1-17 mg.%	2	2	3-9 mg.%	+5.0 mg.%
Uric acid	21	0.2-4.5 mg.%	0	5	0.6-3.4 mg.%	+1.24 mg.%

ciared that she was "shaky and weak in her legs" after several weeks on 50 to 100 mg. of active drug daily, and once later complained of dizziness when taking 200 mg. daily. Another (7) twice complained that the medicine "made his stomach sick"; on one occasion he was receiving active drug but on the other he was taking the placebo. Another (10) on one occasion complained that two tablets (100 mg.) taken in one dose made him feel "drunk" an hour later. A fourth (14) felt "weak and nervous" when her blood pressure had declined from 164/113 to 139/113 mm. Hg; her blood sugar at the time was over 300 mg./100 ml. and she felt better the following week when her blood pressure had fallen further to 134/105 mm. Hg. It was our impression that none of these complaints were due to an intolerance to the drug.

A single patient (28) with lone systolic hypertension was also studied. She manifested a marked fall in both systolic and diastolic pressures, with mean fall of 50 mm. On subsequent placebo medication she showed a resurgence of pressures after 16 weeks to pretreatment levels.

Summary and Conclusions

Thirty-eight patients with sustained diastolic blood pressures over 100 mm. Hg were selected for a single-blind study of the effectiveness of chlorthalidone in the treatment of hypertension. Pretreatment diastolic control levels (on placebo medication) ranged between 102 and 147 mm. Hg. Dosage of the active drug ranged between 50 and 200 mg. daily.

Eleven patients failed to attend regularly and were discarded from the study. Of the remaining 27 patients who received a full course of active medication, 22 manifested a satisfactory fall in mean blood pressure ranging from 18 to 79 mm. Hg, but three of these later defaulted before a secondary resurgence of blood pressure on a subsequent course of placebo medication was achieved. The efficacy of the active drug was thus confirmed in 19 (79%) of the 24 patients completing the study. Five patients (19%) showed an inadequate response (mean blood pressure fall of less than 15 mm. Hg).

In the patients successfully treated, there was an inconstant correlation with concomitant weight loss confirming that the antihypertensive action of chlorthalidone is at least partly independent of its diuretic effect.

Twenty-six patients had blood chemical determinations before and after their course on active medication. Sodium, potassium and chloride showed mean declines of 2.54, 0.48 and 3.9 mEq./L respectively. Blood urea nitrogen and serum uric acid showed mean increases of 5.0 and 1.24 mg./100 ml. respectively.

No significant side effects were observed in any patients.

From these results one may conclude that, within the limits of this study, chlorthalidone is an effective antihypertensive agent in the majority of patients.

It is a pleasure to express our gratitude to the staff of the Hillsborough County Hospital Outpatient Department, and especially to Mrs. Edna Fussell and Mrs. Sylvia Acosta, whose contributions to the smooth and efficient execution of this study were invaluable.

References

1. Hollander, W.; Chobanian, A. V., and Wilkins, R. W.: The Role of Diuretics in the Management of Hypertension, Ann. N. Y. Acad. Sci. 88:975-989 (Oct.) 1960.
2. Friedman, S. M.; Jamieson, J. O., and Friedman, C. L.: Sodium Gradient, Smooth Muscle Tone, and Blood Pressure Regulation, Circulation Res. 7:44-53 (Jan.) 1959.
3. Fuchs, M., and others: Preliminary Report on Hygroton (3-hydroxy-3 (4-chloro-3-sulfamyl-phenyl) phthalamidine), a New Oral Diuretic, Curr. Ther. Res. 2:11-16 (Jan.) 1960.
4. Brest, A. N., and others: Chlorthalidone in the Treatment of Hypertension, Geriatrics 17:752-758 (Nov.) 1962.
5. Kakaviatos, N., and Finnerty, F. A., Jr.: Comparison of Chlorthalidone, A Long-Acting Antihypertensive and Diuretic Agent with Chlorthiazide. Analysis of One Hundred Twenty-Three Cases, Am. J. Cardiol. 10:570-574 (Oct.) 1962.
6. Bryant, J. M., and others: The Antihypertensive Effects of Chlorthalidone. A Comparative Analysis with Benzothiazide Compounds, Circulation 25:522-532 (Mar.) 1962.
7. Klapper, M. S.; Chazan, J A., and Richard, L. S.: The Treatment of Hypertension with Chlorthalidone Alone and in Combination with Reserpine, J. Med. Assn. Alabama 33:164, 1963.

Tampa General Hospital.

Staphylococcal Bacteremia Complicating Myocardial Infarction

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Since myocardial abscess complicating myocardial infarction was first described in 1933,[1,2] only a few cases have been reported.[3] In the case of acute anterior myocardial infarction herein presented fever persisted beyond the usual time expected from infarction. The prolonged elevation of temperature proved to be due to staphylococcal bacteremia, presumably originating from an abscess of the infarcted myocardium and/or a mural thrombus. The available literature recorded no similar case in which the patient survived.

Report of Case

A 57 year old white man was transferred to Riverside Hospital on May 16, 1961, from a hospital in another city where he had been treated since April 28 for what appeared to be a classical acute anterior myocardial infarction. The hospital course seemed satisfactory except that fever, which developed as expected initially after infarction, did not resolve and, for several days prior to transfer, the temperature ranged as high as 103 F. to 104 F. Antibiotics were administered empirically without significant success and, despite some feeling of weakness and diaphoresis associated with the elevation of temperature, for two weeks the patient had had no complaints. There was a past history of upper gastrointestinal bleeding of undetermined origin for which exploratory laparotomy with splenectomy was carried out in 1950.

Physical Examination.—The temperature was 102 F., pulse 80/min. and respirations 16/min. The blood pressure was 124/84 mm. Hg. The point of maximal cardiac impulse could not be ascertained, but there was dullness to percussion at the midclavicular line in the fifth intercostal space. The right cardiac border was located by percussion 4 cm. to the right of the sternum in the fifth intercostal space. The heart tones were distant; a systolic gallop was noted, but no significant murmurs were present. Scattered subcrepitant rales were heard laterally at the bases of both lungs. Otherwise, physical examination was within normal limits.

Laboratory Studies.—The hemoglobin level was 17.6 Gm. %. The hematocrit reading was 52 vol. %. The white blood cell count was 22,000 cu. mm. with 83% segmented neutrophils, 9% lymphocytes and 8% monocytes. Bishydroxycoumarin having been administered prior to admission to this hospital, the prothrombin time was 18 seconds. On urinalysis, numerous bacteria were repeatedly present, culture of which revealed hemolytic Staphylococcus aureus. Cholesterol was 110 mg. %. Transaminase (SGOT), at the time of admission, was 190 units, gradually dropping, though still 73 units at the time of discharge. Hemolized blood may have accounted for a somewhat falsely high reading. Blood urea nitrogen was 9.1 mg. Febrile agglutinins were negative. Blood cultures, on three occasions, resulted in no growth until after two weeks when Staph. aureus, coagulase-positive, was recovered in all. An electrocardiogram (fig. 1) revealed evidence of an extensive anterior myocardial infarction.

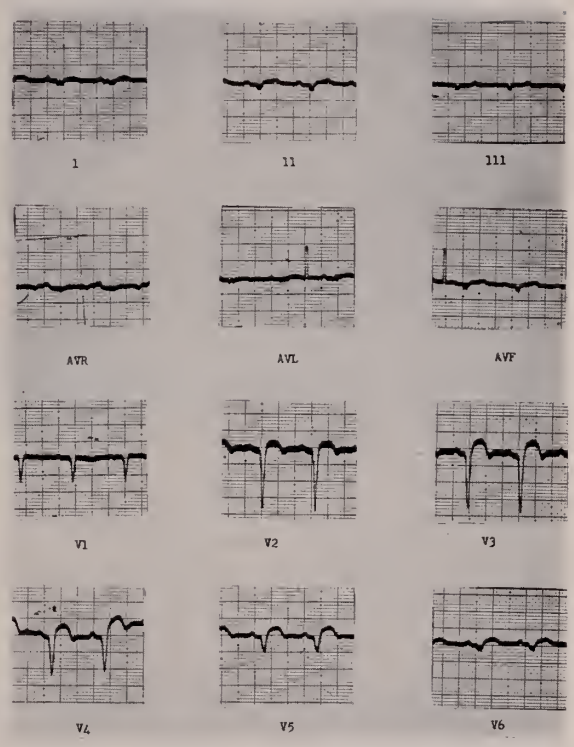

Fig. 1. — Electrocardiogram taken on May 16, 1961, illustrating rather extensive anterior myocardial infarction with a deep Q wave in all leads with the exception of AVR and slight ST segment elevation in V_2 through V_6. Comparison with the electrocardiogram submitted from the referring hospital disclosed some tendency toward resolution; the ST segment elevation in the precordial leads was not quite as prominent.

A roentgenogram of the chest (fig. 2) demonstrated marked cardiomegaly, in contrast to the one forwarded from the first hospital which showed the heart to be normal in size. Fluoroscopy of the chest revealed diffuse cardiomegaly but no evidence of ventricular aneurysm.

Course.—The patient was kept at bed rest and anticoagulants were increased until the prothrombin time was maintained between 10% and 20%. On the fourth hospital day, numbness suddenly occurred in the left foot, the nail beds became cyanotic, and the dorsalis pedis pulse was diminished. Subsequently, pain and erythema developed in a small circumscribed area over the dorsalis pedis artery, suggesting a septic embolism. Having had a febrile course throughout, on the fifteenth hospital day the patient suddenly became cyanotic, the blood pressure dropping to an unobtainable level. An intravenous infusion of levarterenol was immediately started and 1.2 mg. of lanatoside C was administered intravenously, followed by redigitalization with digitoxin. Administration of oxygen was begun and, despite repeated sterile blood cultures at this point, he was given 20,000,000 units of penicillin intravenously daily together with streptomycin, 0.5 Gm. twice a day.

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Fig. 2. — Chest x-ray taken on June 2, 1961. Note some haziness at left base suggesting pleural effusion with prominence of the bronchovascular markings just above the right diaphragm. Rather extensive cardiomegaly with rounding at the apex is compatible with left ventricular enlargement. Previous fluoroscopy revealed no definite evidence of ventricular aneurysm.

The response was gratifying (fig. 3); by the twenty-first hospital day, the patient was afebrile, remaining so throughout the remainder of his stay. Levarterenol was discontinued after 24 hours and within two days oxygen was discontinued. Intravenous penicillin was continued until the thirty-first hospital day when oral phenethicillin, 500 mg. four times a day, with probenecid, 500 mg. twice daily, was begun and continued through the thirty-fifth day. Streptomycin was discontinued on the thirty-second day.

Following discharge, the patient continued to receive bishydroxycoumarin and digitoxin and on the last visit, March 4, 1964, he was asymptomatic. An electrocardiogram (fig. 4) at that time showed little change since the last tracing obtained prior to discharge. A roentgenogram of the chest (fig. 5) revealed only slight cardiomegaly with elevation of the left diaphragm and some pleural thickening of the left costophrenic angle.

Discussion

The association of acute myocardial infarction with bacterial endocarditis has been infrequently reported. Since it was first described in 1856, nearly all reported cases have been those of coronary embolism complicating bacterial endocarditis.[1-9] As late as 1952, less than 200 cases of coronary embolism had been reported.[8,9] In a 1956 review, only 81 were considered to be associated with coronary occlusion and of these only 54 were considered adequately documented.[7]

Lemann,[10] in 1936, reported an unlikely complication of myocardial infarction with involvement of the papillary muscle and subsequent shortening of the chordae tendinae. The mitral valve was rendered incompetent, and subacute bacterial endocarditis subsequently developed.

Cossio and Berconsky[1,3] reported a case of coronary occlusion and myocardial infarction in which an abscess was found in the infarcted area at autopsy. The patient was a 64 year old white man who was admitted to the hospital with a diagnosis of acute myocardial infarction. Pneumonia developed and he died on the fourteenth hospital day. Pneumococcus, identical with the organism cultured from the bronchopneumonic area, was cultured from an abscess found at the site of the myocardial infarction.

Since then, only a few cases have been reported. Tedeschi and Stevenson,[1] in 1950, reported two cases in which elderly patients presented with acute myocardial infarction; in both the course was inexorably fatal. At autopsy, Staph. aureus was cultured from an abscess found at the site of infarction and mural thrombus and from a bronchopneumonic process. Miller and Edwards,[2] in 1951, reported a myocardial abscess complicating myocardial infarction associated with acute pyelonephritis. Joffe and Feil,[3] in 1955, described a case in which the patient died four months after infarction with a final illness compatible with subacute bacterial endocarditis.

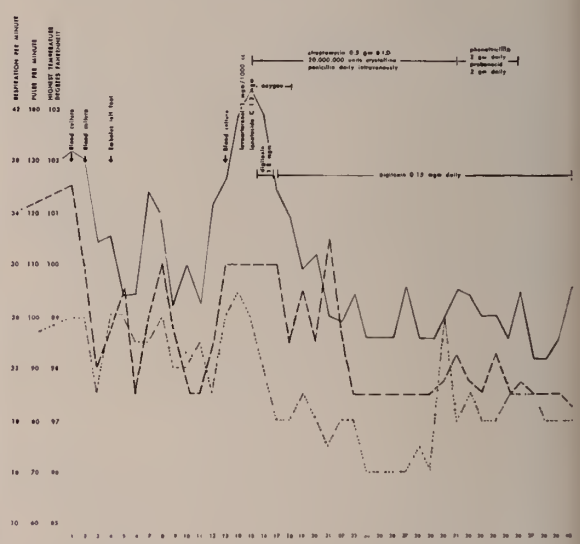

Fig. 3. — Composite chart showing pulse, temperature and respiration. First septic embolus occurred on the fifth hospital day. Blood cultures taken throughout the observation course all revealed, after two weeks, hemolytic Staphylococcus aureus coagulase-positive. Urine culture on May 29, 1964, likewise revealed hemolytic staphylococcus. Penicillin and streptomycin therapy was started on the fifteenth hospital day prior to the return of blood culture reports.

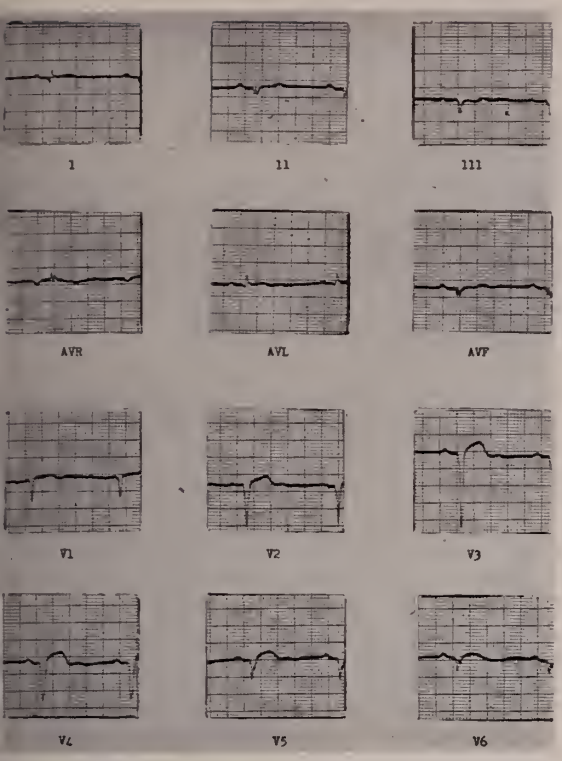

Fig. 4.—Electrocardiogram March 4, 1964. Note continued evidence of extensive old anterior myocardial infarction. Very little further resolution is in evidence.

Fig. 5.—Chest x-ray March 3, 1964. The cardiac silhouette has returned to normal size with no further evidence of basilar congestion. Elevation of the left diaphragm is compatible with previous splenectomy.

Bacteria were demonstrated from sections of the mural thrombi of the left ventricle and right atrium though the original source of the infection was not demonstrated.

It would seem, therefore, that the presence of bacteremia from some other source may well result in infection of the necrotic area of myocardium or mural thrombus in a patient rendered susceptible by a recent myocardial infarction. This unusual complication of myocardial infarction may be more common than is apparent. Heretofore, the only documented cases have been through postmortem examination and indeed, one cannot be certain of the morbid process in the present case in which the patient survived. The classical clinical picture of subacute bacterial endocarditis (low grade fever, congestive heart failure, peripheral embolism, culture of identical organisms from the urine, which repeatedly presented bacteruria), and blood prompted intensive antibiotic therapy following which the patient rapidly improved. No murmurs, suggesting a valvular site for endocarditis, were heard and, in view of the duration of symptoms, one has to conclude there was an intravascular site of infection with nearly constant bacteremia.

The delay in identification of the organism from the blood cultures might be explained by the several antibiotics given empirically prior to the patient's transfer to this hospital. The rapid response to adequate antibiotics would certainly confirm the positive result of the blood cultures. As no other intravascular site for constant blood stream "seeding" was discovered, the most likely would seem to be that of an intramural myocardial abscess or infected mural thrombus. The portal of entry of the infecting organism was not ascertained.

Summary

A case is described in which a 57 year old white man was admitted to the hospital with known recent myocardial infarction but with persistent fever which ultimately proved to be due to staphylococcal bacteremia. This condition would seem to be explained by infection of the infarct producing either an intramural myocardial abscess or infected mural thrombus which allowed constant bacteremia. Massive doses of penicillin and streptomycin proved effective in the treatment of this rare complication of myocardial infarction.

References are available from the author upon request.

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Total Tympanoplasty: V. The Radical Mastoidectomy, Paraffin Implant, Sandwich Graft And Fenestration of Horizontal Canal

J. Brown Farrior, M.D.
TAMPA

Myringoplasty for the closure of simple perforations in the ear drum is now an almost uniformly successful surgical procedure. In tympanoplasty, with the reconstruction of the conductive mechanism of the ossicular chain and the reconstruction of the new tympanic membrane, the otological surgeon can almost always obtain a satisfactory ear drum and can frequently obtain a satisfactory hearing improvement, provided the mucosa of the middle ear is normal and the eustachian tube function is normal. In more advanced middle ear pathology, with diseased or destroyed mucosa of the middle ear, or with obstruction of the eustachian tube, reconstructive surgery had best not be attempted because of the high percentage of failure and disappointment. There remains a small percentage of cases with bilateral conductive deafness, a normally functioning eustachian tube and extensively diseased or destroyed middle ear mucosa requiring a radical mastoidectomy, in which one can still reconstruct a new ear drum, a re-epithelialized middle ear and a satisfactory hearing improvement. When the surgery requires complete replacement of the mucous membrane of the middle ear, reconstruction of the conductive mechanism and reconstruction of a new ear drum, I call this procedure total tympanoplasty.

Total tympanoplasty is basically a complete radical mastoidectomy for the removal of the diseased process within the middle ear and mastoid down to the tympanic orifice of the eustachian tube. This leaves a completely denuded middle ear cavity which must be relined with an epithelial surface. By and large, mucosal grafts, conjunctival grafts and vein grafts have been disappointing in the re-epithelization of the middle ear and the restoration of hearing. As suggested in Rambo's musculoplasty,[1] the insertion into the middle ear of a temporary paraffin splint permits rapid re-epithelization with near normal mucoperiosteum regenerating from the tympanic orifice of the eustachian tube or any remaining hypotympanic cells. Rather than turn a large flap, as in the Rambo musculoplasty, I have preferred to rebuild a new ear drum at the level of the annulus, first, covering the paraffin with blood-soaked Gelfoam and, in turn, covering this with a thin layer of temporal fascia and the canal skin, calling this double-layered graft the "sandwich graft."

The temporary paraffin splint (Teflon or silastic may be used) is removed in two to three months. In most instances a satisfactory re-epithelization of the middle ear cavity results and in some instances a satisfactory hearing improvement. When hypotympanic middle ear cavity Type IV is obtained and there is no satisfactory hearing improvement, fenestration of the horizontal semicircular canal is the final step in total tympanoplasty.

Although cases of total tympanoplasty are few, the results justify the presentation of illustrative cases.

Report of Cases

Case 1.—A 49 year old woman presented a lifetime history of bilateral suppurative otitis media since meningitis at the age of four months. There was a 57 decibel conductive deafness in the right ear and a 37 decibel conductive deafness in the left ear.

Detailed examination of the right ear revealed cholesteatoma filling the middle ear and attic with a polyp in

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the peristapedial area and purulent exudate filling the middle ear and attic. Preoperatively, infection in this right ear was cleared with a polypectomy and attic irrigations of normal saline and Cortisporin.

A right radical mastoidectomy was performed, revealing a fistula in the horizontal semicircular canal and a fistula in the intratympanic portion of the fallopian canal. All cholesteatoma and diseased middle ear mucosa were removed down to the pharyngeal orifice of the eustachian tube, leaving a completely denuded promontory, jugular bulb and carotid artery. Tympanosclerosis involved the oval window niche. There were islands of normal mucosa in residual hypotympanic cells. A paraffin implant was placed in the middle ear. Blood-soaked Gelfoam was placed over the paraffin implant and a new ear drum was constructed with temporal fascia extending from the medial surface of the annulus upward and over the fenestration of the horizontal semicircular canal. The outer layer of the drum was constructed with canal skin.

Postoperatively, the ear became dry and epithelization of the mastoid cavity took place in approximately six weeks. With nature's fenestration the patient obtained a 25 decibel hearing improvement with the paraffin in position. A paraffinectomy was performed three months postoperatively through a hypotympanotomy incision. This revealed near normal mucosa lining the middle ear up to and including the round window.

The patient has an inflatable hypotympanum and has maintained a 25 decibel hearing improvement for one year, giving this 50 year old woman the best hearing of her lifetime (fig. 1). The surgical procedure is described as a radical mastoidectomy with tympanoplasty Type V (fenestration of the horizontal canal) and paraffin implant; a total tympanoplasty.

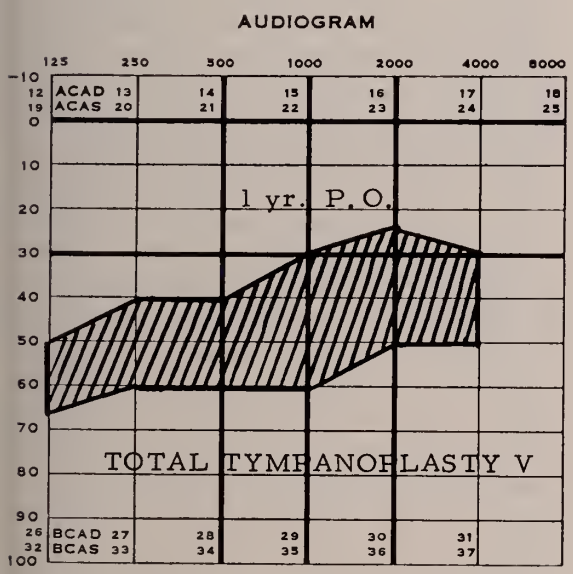

Fig. 1. — The one year postoperative audiogram reveals a maintained hearing improvement of 25 decibels for this patient with lifetime chronic suppurative otitis media. This improvement was obtained following a complete radical mastoidectomy; the re-epithelization of the middle ear around the paraffin implant; the reconstruction of a new ear drum with a sandwich graft of temporal fascia and canal skin and nature's fenestration in the horizontal semicircular canal—a labyrinthine fistula.

Case 2. — A 54 year old woman gave a lifetime history of bilateral chronic suppurative otitis media. In the left ear there was a 60 decibel conductive deafness with cholesteatoma filling the middle ear and a remnant of drum at the annulus, inferiorly. In the right ear there was a 32 decibel conductive deafness with a posterior superior perforation and cholesteatoma in the attic. The hearing in the right ear could be improved to the 13 decibel level with a prosthesis.

A left radical mastoidectomy was performed, removing all mucous membrane and cholesteatoma from the middle ear down to the pharyngeal orifice of the eustachian tube and a few remaining mucoendosteal islands in the hypotympanum. The middle ear was filled with paraffin and a new ear drum constructed with Gelfoam, internal temporal fascia and external canal skin. When the paraffinectomy was performed, the patient had an 18 decibel hearing improvement to the 42 decibel level. Subsequently, a fenestration of the horizontal canal was performed and the patient has obtained a 27 decibel hearing improvement.

On the right ear an atticotomy was performed removing the cholesteatoma from the attic and the external surface of the body and long process of the incus. The posterior process of the incus had been destroyed. A tympanoplasty Type II was performed, covering the external surface of the freely movable incus with a temporal graft and canal skin graft.

In the right ear, with the atticotomy and tympanoplasty Type II, she has obtained a 24 decibel hearing improvement to the 8 decibel level. In the left ear, with the radical mastoidectomy and fenestration of the horizontal canal (total tympanoplasty V) she has obtained a 32 decibel hearing improvement to the 28 decibel level, with the hearing at the 15 decibel level at the critical frequency of 2048.

Summary

Total tympanoplasty is indicated in bilateral conductive deafness from bilateral chronic otitis media when the eustachian tubes remain patent and the diseased middle ear mucosa must be removed.

Total tympanoplasty consists of a radical mastoidectomy, with re-epithelization of the middle ear around Rambo's paraffin implant (Teflon or silastic may be used) and the reconstruction of a new ear drum with a sandwich graft at the annulus.

The sandwich graft consists of a temporal fascia graft to form the inner surface of the new ear drum and a canal skin graft to form the outer surface of the new ear drum.

Fenestration of the horizontal semicircular canal is the most reliable method for improving hearing after a tympanoplasty Type IV, for in similar ears, oval window surgery has been disappointing. This converts a tympanoplasty Type IV into a tympanoplasty Type V.

Reference

1. Rambo, J. H.: The Use of Paraffin to Create a Middle Ear Space in Musculoplasty, Laryngoscope 71:612-619 (June) 1961.

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Treatment of Creeping Eruption with Thiabendazole

Morris Waisman, M.D.
TAMPA

Creeping eruption attributable to parasitization of human skin by filariform larvae of the dog and cat hookworm, Ancylostoma braziliense, has up to now defied successful treatment. Chemotherapy with antimonials, arsenicals, diethylcarbamazine, and promethazine — agents prematurely acclaimed one after the other by enthusiastic observers—exposed their inadequacy after brief clinical trial. The comprehensive studies of in vitro activity of a multitude of agents by Ritchie and King,[1] Blank, Winter and Beck,[2] and Hitch and Iralu[3] foretold that no available medication offered a practicable, safe, and effective lethal action against the larval parasite. This pessimistic conclusion accorded with the clinical experience of physicians in endemic areas, whose deep dissatisfaction with prevailing treatment was exceeded only by the irrepressible discomfort of the unfortunate patient.

In 1963 Mullins and Stone[4] treated creeping eruption systemically with a drug previously untried, thiabendazole (2-[4′-thiazolyl]-benzimidazole), reporting a remarkable and rapid cure of the infestation. Subsequent studies by these authors[5] and others have confirmed the effectiveness of thiabendazole. The drug exhibits a wide spectrum of anthelmintic activity affecting roundworms and tapeworms. Rapidly absorbed and excreted, its toxicity for animals has been shown to be extremely low.

Clinical Study

Through the courtesy of Dr. William E. Worley of Merck, Sharp and Dohme Research Laboratories, a supply of thiabendazole was made available to me in the summer of 1964. The medication was provided as a suspension containing 1 Gm. thiabendazole in 5 ml. of vehicle. Twenty patients were treated and fully followed up, the series including three children, aged two to six years. The oldest patient was 63 years of age. The degree of infestation ranged from a single lesion in a child to an estimated 250 tracks over the trunk and extremities of an adult. Initially, the treatment schedule was 50 mg./kg. body weight for two consecutive daily doses, as suggested by Mullins. Later the dose was changed to 25 mg./kg. twice a day for two days, to reduce or eliminate some of the untoward treatment reactions.

Results were graded as good or excellent in 16 patients, indicating relief of itching within a few days and healing of all or most of the tracks. In the event of incomplete cure, treatment was reinstituted after four to seven days, and for one patient a third course was required. Eleven patients were cured with thiabendazole alone. Partial effectiveness was demonstrable in five patients, up to half the lesions continuing active movement despite the treatment. For four patients the outcome was graded as fair or poor, signifying an unsatisfactory, limited parasiticidal effect or no demonstrable effect at all. Where thiabendazole failed, partially or completely, cryotherapy with solid carbon dioxide was started.

Two patients were observed whose lesions were in the early papular stage, characterized by severely pruritic papules without linear tracks. Interestingly, thiabendazole was ineffectual in these cases. At the return visit of the patients, the papules were frozen lightly with solid carbon dioxide, a well known maneuver for stimulating migration of inactive or sluggish larvae. Subsequent retreatment with thiabendazole resulted in prompt clearing of the infestation in both patients.

Side effects of nausea or of nausea and vomiting were experienced by 14 patients. This reaction usually developed two hours or more after ingestion of the medication, but in no instance did it persist for longer than 24 hours. Some patients complained additionally of dizziness, drowsiness, weakness, headaches, "nervousness," and mild diarrhea. One child, aged two years, showed symptoms of fretfulness and mild irritability for a day after receiving the treatment. In five pa-

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tients the gastrointestinal intolerance, although short-lived, was severe, and two patients refused to repeat the treatment for this reason.

One patient ingested 3 Gm. of thiabendazole a day for four consecutive days without side effects and also without benefit. Two weeks later the same dose was repeated for two days, and again it failed to mitigate the disease.

Thiabendazole ointment in 4% concentration had no visible effect upon lesions topically treated; nor did occlusion with polyethylene plastic film improve the results.

Discussion

Previous years of experience with creeping eruption in Florida provide a background of disheartening familiarity with the disease which may reasonably serve as the "control" in this study. Up to now the management of such cases has been lamentable, sorely trying the endurance of the victim and severely frustrating the physician. It is of course true that the infestation will ultimately heal spontaneously, usually by the time of onset of cool weather. Some patients will improve after a brief period, a circumstance ascribable to invasion by aged or attenuated organisms. But as a rule, the infestation lasts for at least several weeks, and more often it lasts for several months. Never in the past have I observed the almost consistent relief of itching which follows thiabendazole in a day or two, nor the wholesale immobilization of lesions in from several days to a week.

A high incidence of nausea and vomiting is the most important drawback to the satisfactory use of thiabendazole. There is evidence that this effect is of central origin. Dividing the dose to 25 mg./kg. twice a day improves the tolerance somewhat over that of the single daily dose. Fortunately, there seems to be no need for prolonged treatment, as medication given for one or two days will in most instances suffice.

Failure to effect a response in two patients with early nonmigrating papules suggests that perhaps temporary retention of cuticular sheaths endows the organisms with resistance to the drug.[4] Possibly this observation carries a clue to the mystery of why certain larvae maintain a persistent insusceptibility to thiabendazole.

Summary

The experimental anthelmintic drug thiabendazole proved to be an effective and safe treatment for creeping eruption in 16 of 20 patients treated during the summer of 1964 in Tampa. A high incidence of transitory nausea and vomiting accompanied the use of the medication. It has not been determined why a minority of infestations are highly resistant to the treatment which is so dramatically effective in most cases.

References

1. Ritchie, E. B., and King, W. C.: Observations on Reactions of Larvae of Ancylostoma caninum and Ancylostoma braziliense to Various Drugs and Chemical Compounds Based on in Vitro Tests, J. Invest. Dermat. 20:337-341 (May) 1953.
2. Blank, H.; Winter, Mary M. W., and Beck, J. W.: The Effects of Chemical and Physical Agents on Filariform Larvae of Ancylostoma braziliense, Am. J. Trop. Med. 8:401-404 (July) 1959.
3. Hitch, J. M., and Iralu, V.: Studies Relating to Creeping Eruption, South. M. J. 53:447-453 (Apr.)1960.
4. Mullins, J. F., and Stone, O. J.: Thiabendazole: A New Systemic Anthelmintic for the Treatment of Creeping Eruption, South. M. J. 58:65-68 (Jan.) 1965.
5. Stone, O. J., and Mullins, J. F.: Thiabendazole Therapy for Creeping Eruption, Arch. Dermat. 89:557-559 (Apr.) 1964.

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Adaptation of the Human Botfly, Dermatobia Hominis, to its Host and Possible Utility of its Immunologic Mechanisms in Facilitating Organ Transplant

Harry D. L. Kaye, M.D.
CORAL GABLES

My interest in the human botfly, Dermatobia hominis, was aroused by the occurrence of the first reported case in the United States, in a patient who appeared for treatment in my office early in 1963.[1] Of special interest was the notable lack of severe pain associated with infestation with two botfly maggots in the external ear. The patient noticed initial itching, in retrospect had a sensation of wriggling motions under the skin of the external ear, and felt an occasional burning sensation, despite the discharge of pus and blood. When first seen by me, he had had the infection for 24 days. The conclusion could be drawn from this personal case that the severe and excruciating pain of these infestations reported in the literature might well be ascribed to the accompanying secondary infection. In this case the infection might have been minimized by the relatively high standard of living of the patient, who was an agricultural and chemical engineer, in that there would be less pathogenic bacteria on his skin than compared, for example, to a peon, and also to the fact that he had received previous penicillin treatment. As a corollary to this conclusion, it may be deduced that this botfly maggot has reached a relatively high degree of symbiosis with its human host. The infestation is localized to an area quite near the point of entry, and is self-limited, the maggot making its exit from its subcutaneous abode within five to 10 weeks.[2]

The ingenious utilization by the female botfly of other insects, including mosquitoes, to carry her eggs during the incubation period and the provision, in the case of the mosquito, of a ready-made portal of entry when hatching is triggered by the warmth of the mammalian body, has been described, and constitutes a rather impressive example of adaptation of this parasite to its environment. Should the flying incubator be a nonbiting insect, however, the larva is fully capable of penetration of the intact skin. At maturity, the larva can reach the size of 1 inch in length. The mature larva comprises a relatively huge mass of entirely foreign protein, which is able to stave off any attempts by the human body to cast it off for its entire life cycle, comprising a relatively long time, as much as 12 weeks. If the larva should die, however, there is an immediate and violent rejection of it by the host. It would seem amazing that such a large mass of foreign protein is able to maintain itself in the body without arousing the rejection mechanisms which would ordinarily be called into immediate activation if a minute fraction of this amount of any other foreign protein were analogously injected subcutaneously. This ability would make biological neutralization of these host defense mechanisms another power of adaptation exerted only as long as the larva is alive.

One could speculate that this is done by a number of methods. 1. The cuticle of the larva might be a mechanical and impermeable barrier, which does not allow perception by the host of its true foreign protein nature. Of interest in this connection, the larva is probably much more permeable at the time of implantation, when newly hatched, and also during the ecdyses or molting between larval stages, of which there are at least three. Naturally, it also follows that the cuticle should be impermeable after death of the larva so that rejection might be expected to be postponed until autolysis should occur. 2. The

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infestation could be encapsulated and thus exteriorized by the body. This method would create a problem of feeding for the larva, that is, whether it be blood, subcutaneous fat, or tissue fluids. Further, related larvae of the ox botfly, for example, have an extensive and often devious migratory path through the muscular tissue and intermuscular septa of their natural hosts before reaching their final site of infestation. The formation of a traveling capsule would be difficult to conceive. 3. The protein exposed to the human body may be one so closely allied in structure to host proteins that it is not "foreign" enough to arouse a foreign protein reaction. This method would require a phenomenal degree of adaptation, but would be possible. The larvae, however, are able to infest many other mammalian species, whose reaction to specific foreign proteins could be expected to vary widely in terms of species differences. 4. This response could also be a result of a secretion by the larva of a substance which is capable of negating immunological defense mechanisms. As far as can be determined at present, no investigations have been conducted to inquire into this aspect of infestation. Spielman[3] was of the opinion that the immunologic mode of action is the most likely.

The questions posed here would invoke many investigational projects, both in the entomological, and the immunological approaches. There are, however, at least two practical applications to which the antidefense mechanisms of the botfly larvae could be applied. The first is the application of these principles to facilitate avoidance of rejection of organ transplants in nonmonozygotic twins, in which homologous proteins, and not heterologous, are involved. These methods which consist of sublethal total body irradiation and various chemicals, as cellular poisons, nucleic acid synthesis antagonists, and antimetabolic agents have been singularly drastic and unsuccessful. It would be a great boon to organ transplantation if a biological, and more specific, method of modifying organ transplant recipients could be utilized. With each example of infestation by larvae of the human botfly that occurs, there is, in effect, a successful natural transplantation of a heterologous organism, as long as it is alive.

Investigations into neutralization of immunologic protection mechanisms could affect studies in cancer research, particularly in regard to transplantation of tumor or metastasis, as well as in reference to the fundamental nature of neoplasia as a whole.

Summary

The human botfly has shown singular adaptation to existence in the human body as a significantly large mass of foreign protein, capable of averting the body's rejection mechanisms.

The infestation is a sophisticated process, in which the host is relatively little damaged. This is evidence of well developed adaptation of the parasite to the host.

The ability of self protection described deserves investigation per se, as well as in regard to its applicability to exert beneficial effects in other immunologically connected situations, such as homologous organ transplantation.

References

1. Kaye, H. D. L., and Higgins, R. P.: Human Botfly Infestation in the United States, J.A.M.A. 189:64 (July 6) 1964.
2. James, M. T.: Flies That Cause Myiasis in Man, 631 USDA, Sept. 1947, 98-104.
3. Spielman, Andrew, personal communications, August 1964.

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Chemotherapy of Pelvic Malignant Disease

M. Murray Schechter, M.D.
MIAMI

In the past 15 years, the outlook for and chemotherapy of pelvic malignant conditions has undergone a drastic change. Prior to 1950, the internist interested in chemotherapy had little to offer patients who were referred or presented with malignant disease arising in the pelvis. Aside from nitrogen mustard, drug therapy was rarely considered. When it was used, it was usually a last resort measure in a patient in a near terminal state.

The purpose of this presentation is threefold: (1) to outline the various chemotherapeutic agents which are available for pelvic malignant neoplasms; (2) to outline the appropriate drugs with regard to the various types of malignant growths; and (3) to record some of the observations noted by the therapist in the course of therapy.

It should be understood that surgical intervention and the various forms of irradiation frequently precede, or are used in conjunction with chemotherapy in the treatment of many forms of neoplasm. This paper concerns itself with chemotherapy and should not be construed to eliminate other forms of therapy. The choice of treatment, of course, requires the judgment of the attending physician. The primary purpose of this paper is to acquaint the practicing physician with the various agents available and their uses.

Available Drugs

In general, the drugs available can be classified in five major groups:

1. The alkylating agents of which mechlorethamine hydrochloride (Mustargen) is the most commonly used and best known example. Included in this group are triethylenethiophosphoramide (Thio-Tepa), chlorambucil (Leukeran), cyclophosphamide (Cytoxan) and phenylalahine mustard (Alkeran).
2. The fluorinated pyrimidines of which 5-Fluorouracil is the best known and the most commonly used.
3. The derivatives of the periwinkle plant of which vinblastine sulphate (Velban) is the most commonly employed.
4. The folic acid antagonists of which methyl-pteroylglutamic acid (Methotrexate) is the most commonly used for pelvic malignant neoplasms.
5. The special antibiotics of which Actinomycin D and Mitomycin are the most commonly used.

All of these medications have one property in common. They are all highly toxic and especially affect the bone marrow and blood-producing elements. The doses of each must be individualized for each patient, with many factors to be considered, among them the clinical condition of the patient, adjunctive therapy including recent operation and irradiation, status of the bone marrow, and correlation with any previous therapy.

In addition to these cytotoxic agents, other substances are used in conjunction with chemotherapy, especially the anabolic agents, testosterone and progesterone.

Therapy According to Types of Tumors

Carcinoma of the Ovary.—This group of tumors represents a type of malignant disease responsive to chemotherapy. Cystic tumors of the ovary frequently present with generalized peritoneal seeding, are frequently bilateral, or are so large and adherent as to preclude surgical excision. In the present series under study, it is significant that most patients with these tumors are referred by general surgeons and thoracic surgeons rather than by gynecologists. I do not believe that this referral is due to the surgical invasion of the gynecologist's province. Instead, it is because these tumors so often present in a far advanced inoperable state as masses or ascites. An exploratory laparotomy is then carried out and the diagnosis is made at operation. This problem represents a situation where improved diagnostic measures are necessary in order to bring patients

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Chairman of the Tumor Board and Director of the Tumor Clinic, Mercy Hospital, Miami.
From the Department of Medicine, University of Miami School of Medicine, Miami.
Presented by invitation at the Mercy Hospital Staff Meeting, February 1965.
A part of the 5-Fluorouracil used in these studies was graciously donated by Hoffmann-LaRoche Inc., Nutley, N. J., through the courtesy of Dr. V. Mattia and Dr. Edward Miller.
Part of the Vinblastine utilized in these studies was graciously donated by Eli Lilly and Company, Indianapolis, Ind., through the courtesy of Dr. Paul J. Fouts and J. G. Armstrong.

with these tumors to the clinician for therapy at an earlier stage. Unfortunately, cytologic studies are not available for ovarian cancer at this time. In addition, frequently these tumors will spread from a tiny primary lesion which cannot be felt on routine bimanual examination. Transvaginal aspiration may offer another method for earlier diagnosis.

The most dramatic response is that of the cystic type ovarian tumors to the alkylating agents. I prefer to use Thio-Tepa or chlorambucil. Thio-Tepa should be administered parenterally, either intravenously or intramuscularly in most cases. An average dose of 60 mg. is usually utilized. This agent is of particular value where there is generalized seeding of the abdomen with ascites or a pleural effusion secondary to diffuse or localized neoplastic disease of the pleural cavity. In this special situation, as much as possible of the effusion should be removed by tap, either thoracentesis or paracentesis, and then the Thio-Tepa is injected into the cavity. A dose ranging between 30 and 60 mg. should be utilized, depending on the individual characteristics of the patient as enumerated previously.

Chlorambucil can also be used and has the advantage that it can be given orally. With this product, therapy should be carried out for at least six weeks in order to judge fully the effect of therapy.

The solid tumors of the ovary are not nearly as responsive as the cystic tumors, but therapy is justified nevertheless.

Recently the fluorinated pyrimidines have been used in carcinoma of the ovary and appear to be especially useful in the presence of effusions. 5-Fluorouracil is injected intravenously either by straight intravenous push, or in an infusion over three to eight hours. The average dose is generally recommended at approximately 1 Gm. per day for four consecutive days, followed by 500 mg. for four additional days. Subsequent dosage depends on the individual situations. Placing the 5-Fluorouracil in an intravenous infusion appears to decrease the toxic effects, but there is some question as to whether or not it also decreases the therapeutic effect. It may be necessary to increase the dose if this method of administration is utilized.

Carcinoma of the Uterus: Choriocarcinoma.—Recently, choriocarcinoma has shown dramatic response to the use of folic acid antagonists, specifically Methotrexate. It is also responsive to Vinblastine and Actinomycin D, although Methotrexate is the drug of choice. Treatment usually consists of a five day course of therapy with a dosage ranging between 10 and 30 mg., usually 25 mg., administered intramuscularly or orally. This is higher than the dose usually administered for head and neck tumors and consequently requires careful observation. Repeated courses should be withheld until toxicity from the preceding course subsides. Subsidence may take approximately two weeks or longer. In the event of overdosage, Leucovorin should be given as soon as possible, in a dose of approximately 6 mg. Leucovorin, however, is not effective if more than six hours have elapsed since the administration of the overdosage of Methotrexate. Studies showing a response rate as high as 90% have been reported with this routine. If the choriocarcinoma is resistant to Methotrexate, or for some reason Methotrexate cannot be used, Vinblastine should then be utilized. This medication is given intravenously, usually into the tubing of a running intravenous drip. The dosage must be highly individualized. Generally 0.1 to 0.15 mg./kg. is administered at one time. Repeat courses of therapy are given as needed with careful observation for toxic effects.

Carcinoma of the Endometrium.—Recent studies have demonstrated the effectiveness of large doses of Progestogen for palliation in this disease. I prefer to use Delalutin (hydroxyprogesterone caproate) either alone or in combination with the alkylating agents mentioned. Here again, therapy must be carried out for many weeks before evaluation of the therapeutic effect can be determined, in full.

The very nature of these cytotoxic agents makes it mandatory that pregnancy be excluded. Reports have been made of normal births following use of Methotrexate for choriocarcinoma, but it must be considered that the teratogenic possibilities with the use of these agents are very high.

Carcinoma of the Cervix.—The internist and oncologist interested in chemotherapy are seeing a great deal less of this disease. The use of the Papanicolaou smear in conjunction with radical surgery and advanced irradiation have just about done away with the need for chemotherapy for palliation. In the far advanced cases, however, where nothing further can be offered the patient, the alkylating agents may be used for some palliation.

A few words should be said about adjunctive

therapy, using anabolic agents and testosterone. In a study currently in progress, it is becoming more apparent that patients under therapy with carcinoma of the ovary appear to do much better if anabolic agents and/or testosterone is given in conjunction with the chemotherapeutic agents. Whether this response represents the fact that ovarian tumors are hormone-responsive, or whether it is merely the anabolic effect of the testosterone, cannot be definitely said at the present time. The beneficial effects seen, however, are great enough to be more than coincidence. This study is to be reported at a later date.

Summary

A presentation is made outlining the various chemotherapeutic agents available in pelvic carcinoma. In addition, the use of these agents in the various types of tumors is described. It is emphasized, however, that this paper is limited to chemotherapy of pelvic tumors and should not be construed to mean that chemotherapy supersedes surgical therapy or irradiation. In fact, chemotherapy many times can be used following these modalities and in conjunction with them.

It is especially significant that carcinoma of the ovary still presents to the clinician in a far advanced state. Additional means of early diagnosis are most important in this disease in order to improve the survival rate.

Acknowledgment is made to Mrs. Marie Fletcher for her aid in the preparation of the manuscript.

References are available from the author upon request.

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Carcinoma of the Vulva Complicated by Pregnancy

A Case Report With Discussion

Denis Cavanagh, M.D.
and Pascual Hernandez-Roman, M.D.
MIAMI

Carcinoma of the vulva is a disease of the aged. It is an infrequent occurrence in young women and is rarely seen in association with pregnancy.[1] Recently, Collins and Barclay[2] reported six cases among 108 patients who underwent vulvectomy for vulvar malignant disease and in addition collected 21 cases from the literature. In this excellent review, these authors pointed out that in only nine instances was the diagnosis made during pregnancy with five of the lesions being found in the third trimester. In view of the paucity of reports on coexistent vulvar carcinoma and pregnancy, and a number of other complicating features, it is thought that the following case may be of interest.

From the University of Miami School of Medicine, Department of Obstetrics-Gynecology, Jackson Memorial Hospital, Miami.

Report of Case

A 39 year old white woman, para 3, gravida 5, was first seen on Oct. 3, 1962, in the thirty-eighth week of pregnancy. In 1950 she had an abortion following an accident. Three previous pregnancies were normal. At two years of age she had had rheumatic fever, but subsequently had no cardiac disease. Her family history was not relevant. The patient had been hospitalized during the present pregnancy because of abdominal pain associated with uterine fibroids. On physical examination, the fundus of the uterus corresponded to 38 weeks of gestation, and multiple tender nodules were present on the right side of the uterus. The baby was estimated to be about 6½ pounds and was presenting by the vertex. Fetal heart tones were heard. On examination of the vulva, there was a lesion about 3 cm. in diameter close to the urethra in the region of the clitoris. The vagina was not involved and the cervix was clean. No other abnormalities were noted apart from a small rectocele. No intrinsic rectal lesions were present.

A biopsy done previously showed a very poorly differentiated carcinoma. A second biopsy taken on October 3 was reported as a squamous cell carcinoma of the vulva (Grade II). The slides were reviewed and although it was thought that the vulvar lesion was primary, a metastatic lesion from uterine sarcoma could not be

completely ruled out. The cystoscopy and chest roentgenograms and routine preoperative studies were within normal limits. Vaginal cytology gave negative results.

On October 10, a healthy female child, weighing 6 pounds, was delivered by classical cesarean section. Total hysterectomy and bilateral pelvic lymphadenectomy were carried out. The appendix was not grossly abnormal, but was removed as a routine measure. Examination of the hysterectomy specimen revealed leiomyomas with degeneration, but no sarcomatous change was present. The appendix, interestingly enough, showed early acute appendicitis. A prevulvectomy lymphogram revealed a right inguinal node with an irregular filling defect, suspicious for metastatic disease, but the barium enema examination and intravenous urogram were normal.

Two weeks after the first operation, a radical vulvectomy with removal of two thirds of the urethra and repair of the rectocele was performed. Bilateral groin dissection was performed and the nodes removed in continuity with the vulva. Bilateral transplantation of the sartorius muscles to cover the femoral vessels was carried out.

Histopathologic examination of the specimen revealed invasive squamous carcinoma of the vulva with margins clear and no nodal involvement. Although more bleeding than usual was encountered at vulvectomy, wound healing was more rapid than usual with minimal separation. The postoperative course was relatively uneventful and the patient was able to control urine flow satisfactorily after removal of the self-retaining catheter on the fifth postoperative day. She was discharged from the hospital on November 17. To date, she is living and well without evidence of recurrence.

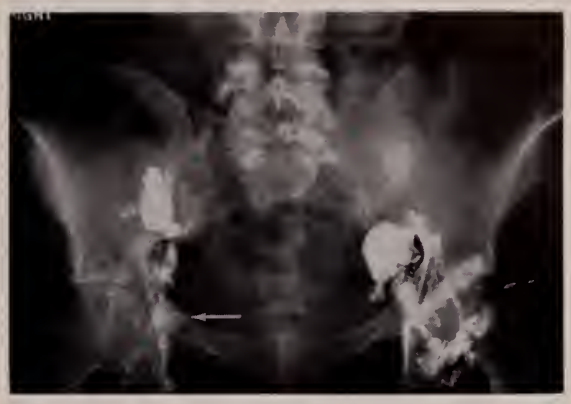

Fig. 1. — Arrow indicates artefactual defect which may be confused with nodal metastasis.

Discussion

The patient was first seen in the thirty-eighth week of pregnancy. A pathologic report of an undifferentiated tumor was received. On abdominopelvic examination, tender masses were found on the uterus. Primary vulvar carcinoma is usually a well differentiated lesion,[3] so a metastatic lesion from sarcomatous change in uterine fibroids had to be considered a remote possibility. Thus, the uterus was removed for histopathologic examination at the time of cesarean section. The pelvic lymph nodes were removed because by far the most likely diagnosis was coexistent pregnancy and leiomyomas with primary carcinoma of the vulva. The presence of a relatively anaplastic lesion and the irregular filling defect seen in the right groin nodes on the lymphogram suggested metastasis to the regional nodes, but this was not confirmed on histopathologic examination of the nodes. On review of the films, the nodal defect was believed to be artefactual (fig. 1).

The second biopsy was performed prior to treatment to ensure that no error existed in the transfer of slides from one hospital to another. A moderately well differentiated squamous carcinoma (Grade II) with tendency to pearl formation and keratinization was evident on the microscopic sections. Poorly differentiated lesions have a high incidence of positive nodes[3] as compared with well differentiated tumors. The presence of nodal involvement worsens the prognosis. Tumor size of less than 3 cm. in diameter is considered to carry a good prognosis.[4]

Since vulvar malignant lesions generally appear in older women, younger patients make up no more than 6 per cent even in large series.[5,6] All vulvar lesions call for biopsy irrespective of the age of the patient. It is now generally recognized that the main factor worsening the prognosis of the cancer patient with pregnancy is delay in diagnosis. The early recognition and biopsy of this lesion by the referring physician are a more important factor in deciding the patient's prognosis than the extensive surgical treatment.

In vulvar malignant disease, the radical treatment may be prior to delivery or after delivery. There is no contraindication to further pregnancies in most cases. Successful subsequent pregnancy with delivery by cesarean section or vaginal route after initial therapy has been reported.[7,10] The prognosis of the mother is affected by the cancer itself, and influenced adversely by delay in diagnosis or improper management of the case, rather than by coexistent or subsequent pregnancies.

After careful evaluation of the individual case near term, delivery by cesarean section should generally be performed. If the patient is fit, iliofemoral node dissection and radical vulvectomy may be performed at the same time. Alternatively, the curative operation for carcinoma of the vulva may be delayed for two weeks after cesarean section. In selected cases, the pelvic node dissection may be performed transperitoneally at the time of section. Although enough cases are not

available for adequate evaluation, it seems evident that patients with malignant lesions of the vulva are not suitable for vaginal delivery. Cesarean hysterectomy was indicated in the present case because of the presence of tender tumor masses on the uterus. Although they were considered to be benign leiomyomas, histopathologic examination of these lesions was believed to be indicated. Since they were multiple, cesarean hysterectomy was considered the most desirable operation for the patient. Only degenerative changes were found on microscopic examination. Appendectomy was carried out on a prophylactic basis as with all extensive pelvic surgery. Although carried out primarily to help reduce the list of differential diagnoses if abdominal pain occurs postoperatively, an occasional pathologic appendix will provide an additional dividend.

On a basis of area, clitoral lesions are less common than labial lesions, but they are especially troublesome because they involve the periurethral area. Because of the proximity of the tumor to the urethra in this case, about two thirds of the urethra was removed, with the specimen. Incontinence may be the consequence of such a procedure, but generally only mild frequency and urgency are observed. These symptoms are more marked when the patient is on her feet. In the presence of a chronic cough, stress incontinence often occurs. In general, however, these patients are amazingly continent. The patient presented here is now 21 months postoperative. She has frequency every two to three hours during the day, but does not find this incapacitating.

A rectocele repair should be performed as a routine procedure at the time of vulvectomy if any laxity of the posterior vaginal wall is present. It is an important factor in maintaining the normal structure of the vaginal canal in these young patients. A small rectocele which goes untreated will generally enlarge postoperatively.

Since wound breakdown is to be expected in patients with wide resection, we routinely cover the femoral vessels with the sartorius muscles as described by Way.[11] We have had little success with primary skin grafting, but where denuded areas are extensive in the postoperative period, we have found secondary grafting most useful.

Summary

A poorly differentiated carcinoma of the vulva in the patient with degenerating fibroids complicating pregnancy is described. In all cancer patients, it is important to have a broad general plan but to tailor the treatment to the needs of the individual patient.

References are available upon request from the authors.

1600 Northwest Tenth Avenue.

Prevention of Epidemic Encephalitis

With summertime and mosquitoes there is the possibility of another outbreak of encephalitis. The large 1964 epidemic in Houston and the one of 1962 in St. Petersburg are fresh and impressive memories. These community disasters we hope to be able to prevent. Success will depend substantially on early recognition. In the event that St. Louis or another mosquito-borne central nervous system virus does appear, we are hopeful that its presence can be identified at the earliest possible moment, thus permitting early activation of control measures designed to prevent epidemic spread. To this end the State Board of Health is intensifying its surveillance program. With the expansion of the virus laboratory it is now possible to study larger numbers of specimens from humans. The use of these new laboratory facilities on indicated cases is encouraged.

The hemagglutination-inhibition serologic test provides early presumptive laboratory findings. From all cases with clinical observations suggesting viral CNS infection attending physicians are invited and urged to submit an acute phase blood specimen to the State Board of Health laboratory in Jacksonville, the Encephalitis Research Center in Tampa or the University of Miami School of Medicine virus laboratory. These virus laboratories are prepared to perform the hemagglutination-inhibition serologic test for St. Louis and Eastern encephalitis and to report findings promptly. Specimens accompanied by clinical data and spinal fluid findings, if these are compatible with arbovirus infection, will have top priority for testing. When the convalescent specimen is received, it will be subjected to the HI test and the acute and convalescent specimens will be examined by complement-fixation for evidence of other CNS viruses as indicated. Viral isolation studies will be done on suitable necropsy specimens from a suspect case of viral encephalitis.

Wilson T. Sowder, M.D.
State Health Officer

Editorials

Thomas R. Jarvis

Managing Editor Resigns

On July 1, 1965, Thomas R. Jarvis resigned as Managing Editor of The Journal of the Florida Medical Association to assume a position with the Florida State Board of Health. Since 1951 he has been a part of the FMA family, serving the Association as Assistant Supervisor of the Bureau of Public Relations for two years before becoming Assistant Managing Editor and in 1959 Managing Editor of The Journal. In 1958 he was appointed Director of the Publications Department.

In each area of service many Association members have worked with and come to know Tom. My close association over the past years has enabled me to know of his interest in medicine, his constant effort to develop and improve the scientific aspects of our Association, his ever present willingness to cooperate with any doctor at all levels of Association business, and his constant support of your Editors, past and present. These characteristics have created a place for him in our hearts.

We shall miss Tom. We wish him success in his new position. In our thoughts, however, he will continue to be a member of the FMA family.

T.M.

Comment on Dr. Marriott's Paper

"Clinical research" is much aspired to, frequently attempted, and often falls short of perfection because of insufficient planning before the study, too few or poorly controlled observations during the study, and faulty interpretations of the results. Single patients carefully observed may be veritable gold mines of worthwhile information, the prototype being Beaumont's observations on the gastric function in his Indian patient with the traumatic gastrostomy. No less impressive are the astute epidemiologic observations by Dr. William Pickles based on his careful records kept over many years on the relatively stable population of his village in Ayrshire. On the grand scale are the more recent VA studies of tuberculosis, the cooperative studies on anticoagulation and the epidemiological studies of dietary and other factors in arteriosclerotic heart disease.

Many papers purporting to be "clinical research" are submitted to this and other medical journals each year and must be rejected because of faults in planning, in lack of controls, or in interpretation of the results. A refreshing change is the paper by Dr. Marriott and his co-workers published elsewhere in this issue of The Journal.

The study of the antihypertensive-diuretic agent chlorthalidone (Hygroton) is well planned, although not elaborate, and the section on material and methods indicates the care taken to avoid errors in measurements of the blood pressure, and to avoid attributing favorable response to the drug by having a course of placebo both before and after the active medication was given. Of the 94 hypertensive patients started on placebo medication, 55 were discarded because of irregular attendance, or "failure to satisfy minimal criteria for inclusion in the study"; it is regrettable that these minimal criteria are not published, and it would be of interest to know how many were excluded from the study because of a significant sustained drop in blood pressure on the placebo alone.

I am curious as to the source of the 50 mg. tablets of chlorthalidone used in the study, since the 100 mg. size is the only one listed as available as far back as 1961 in the Physicians Desk Reference. If these were specially prepared for this study, credit should have been given to the Geigy Pharmaceutical Company. If the 50 mg. tablets were manufactured prior to 1961, it not only indicates the wisdom of the company in dropping this smaller tablet (only three of the 28 patients achieved a significant drop in blood pressure on this daily dose), but also is indirect evidence of the long time necessary to plan, execute, and write up the results of such a study.

Although the results of the study come as no surprise, confirming previous reports and the experience of many clinicians, The Journal is pleased to publish such a carefully planned, executed, and summarized clinical research report on a relatively new drug.

John M. Packard, M.D.
Pensacola

Opportunity Knocks for Surgeon and Veterinarian Cooperation

A wealth of experience is to be gained from cooperation between practicing surgeons and practicing veterinarians. In our community of Lakeland, there has been an amiable cooperation between Dr. William F. Jackson, veterinarian, and myself. This cooperation has extended to several mutual projects with advantage.

The first of these projects concerned the development of an operation for removal of heart worms from hunting dogs. Dr. Jackson has developed a simple procedure for the removal of heart worms from the right ventricle and pulmonary artery, and has developed an entire set of instruments so that this operation can be done simply, efficiently, with minimal risk, by one veterinarian, with anesthesia and other incidentals automatically cared for, with automatic respirators. He has achieved national prominence through his development of this operation, and has performed this operation on closed circuit television for a national veterinarian convention.

Many interesting discussions arose from these contacts, and the second project concerned a research grant from the Florida Tuberculosis and Respiratory Disease Association for the investigation of the pathologic changes in the structure of the lung associated with atelectasis. This project called for operation on 18 dogs with boarding of the animals for periods up to one year, and subse-

quent reoperation and additional boarding. Dr. Jackson's facilities offer a well equipped, modern, animal hospital, with excellent care for the experimental animals, with an operating room for the production and correction of the lesions to be studied.

At the present time, we are working on the development of open heart techniques, using extracorporeal circulation, and are investigating the effects of vasodilators in conjunction with extracorporeal circulation.

The excellent facilities available for the care of animals represents a community resource that should not be overlooked by the practicing surgeon. These resources are especially valuable for the surgeon who is interested in a research project, but should not be overlooked in the teaching of surgery to house staff, both at intern and resident level, and for the development of skill and technique in a new or untried operative procedure on the part of the surgeon himself. Our experience would commend this form of association as extremely valuable.

Edwin Tutt Long, M.D.
Lakeland

Divergent Views

Delegates attending the April meeting of the Florida Medical Association witnessed a minor conflict between (to greatly oversimplify) the Pathologists and the Clinicians. The subject of the controversy—licensing and supervision of Clinical Medical Laboratories is not germane to this discussion. It was apparent to all, however, that beneath the arguments lay the old bitterness, misunderstandings, and mistrust that have plagued the joint efforts of these doctors.

To the Clinician, be he generalist or specialist, the Pathologist is often looked upon as a hospital representative, a company man. He is a censor rather than an aid; he condemns rather than consoles; he rails rather than rallies; he is, to the many physicians who do laboratory work in their offices, an endowed competitor. The Pathologist's comparative freedom from patient responsibility makes him less the physician, more the business man. The Pathologist, in the minds of his clinical colleagues, may be impertinent when he should be pertinent, theoretical when he should be practical. He cannot find the endometriosis the surgeon knows was present; his reports are couched in phrases beginning with "if," "possibly," "consistent with." The crowning insult—he will not commit himself on a frozen section. He needs special stains. The Pathologist, according to some of his brethren, is a pseudoscientist; his laboratory cannot do a barbiturate analysis after 5 p.m.; cannot decide what killed a patient until 9 a.m. the next morning. In short, he is unaware of the fact (again the sometime clinical viewpoint) that the tissue examination, the laboratory, the Pathologist's entire responsibility is directed toward a specific patient problem.

This, then, is the jaundiced picture drawn by some practicing Clinicians of their fellow practicing Pathologists.

The Pathologist may see his Clinician friends with eyes equally stained with bilirubin. The Clinician is too busy making money to practice good medicine. The surgeon operates on normal tissue removing large pieces of anatomy often for minor physiologic malfunction. The Clinician simply does not know enough medicine to understand the carefully prepared surgical and laboratory observations. The Clinician is a show-off, a braggart, a public relations man. The Clinician runs the county, state, and national medical associations. He is a politician. He talks often, listens rarely; he fails to attend autopsies, understand tissue complexities, and is totally ignorant of the problems of laboratory administration. The Clinician has no idea of the Pathologist's responsibility to hospital administration, the difficulties of working as a "company man."

Blessed indeed is the physician who can resolve these viewpoints in his own sphere of activity. Less blessed, but fortunate, is one who can resolve the two positions in application to larger medical principles, namely, Licensing and Supervision of Laboratories.

The changing economic patterns call for great understanding on the part of all physicians. Sauce for the goose (Clinician) may not be sauce for the gander (Pathologist). Notwithstanding, we doctors are serving the patient. Not only the sauce, but the entire meal must be palatable.

Courtlandt D. Berry, M.D.
Fort Lauderdale

Systemic Chemotherapy of Creeping Eruption

Cutaneous larva migrans, or creeping eruption, is a disease characterized by linear lesions caused by the migration of the larvae of the dog or cat hookworm within the skin of man. The patient with this conspicuous eruption is very familiar to physicians in the southeastern parts of this country, particularly during the summer months. There probably are more cases in Florida than in other states, but the disease occurs throughout the warmer moist regions of the world.

The cause of creeping eruption was originally identified in 1925 in Jacksonville by the dermatologist Kirby-Smith, the pathologist White and the U.S. Department of Agriculture entomologist W. E. Dove. Hundreds of cases were seen in a special clinic and 200 lesions were excised. From these, 40,000 serial sections were prepared and five nematode larvae of unknown type were found. The larvae were always found beyond the visible lesion traveling in an unpredictable course. No parasite was ever found in a burrow. This is the reason for treating an inch beyond the advancing border if one uses cryotherapy. The serpiginous clinical lesions apparently are an inflammatory reaction at the site where the parasite has been.

Dove and White in 1928 were successful in producing the disease experimentally in the skin of human volunteers with nematode larvae from the dog and cat hookworm Ancylostoma braziliense but not with A. caninum. Similar results were reported the same year by Bedford Shelmire of Dallas, Texas. Once the infection of damp sand and soil from ova in dog and cat feces was recognized, control measures could be instituted. Thus arose the ordinance in many Florida communities against animals on the beaches, a rule which still should be enforced. Childrens' sand boxes are a classic source of infection. If soil is contaminated, as under a house or in a yard, spraying with one of the organic phosphate type of insecticides such as Diazinon or Malathion will probably kill the larvae but not prevent reinfection of the soil. Hookworm in household pets should be treated to prevent further soil infection.

Dove became one of Florida's distinguished citizens as director of the U.S.D.A. entomological laboratory at Orlando and is credited as one of the developers of DDT during World War II. He also received the silver medal of the American Medical Association for his work on endemic typhus.

Until recently the only effective therapy of creeping eruption was freezing the area of the advancing lesion with ethyl chloride or carbon dioxide ice. This does not kill the larvae, but apparently causes their desquamation in the blister contents. Systemic chemotherapy has been recommended in the past but probably did little to speed the spontaneous clearing of the lesions.

Katz in Miami showed that 80% of lesions disappeared within four weeks in patients treated with placebo tablets. In this issue of The Journal Waisman of Tampa reports the distinct benefit of the new orally active drug thiabendazole. As he points out, however, the optimum dose has not been determined. Some authors have used 50 mg./kg. once a day for two days or once a week for several weeks. Waisman reports that 25 mg./kg. twice a day for two days seems satisfactory. Even with this dose, however, nausea, anorexia and even vomiting may occur and limit the administration of the drug to the patients not easily treated with cryotherapy. Nonetheless, as Waisman indicates in 16 of his 20 patients, the lesions were immobilized and itching promptly ceased in a manner he had never before observed. Other recent reports from dermatologists in Jacksonville and Miami agree with these conclusions. We in Florida owe a special debt to the Texans: Shelmire who introduced cryotherapy in 1916 and Mullins and Stone who first used thiabendazole for creeping eruption in 1964. It is hoped that the drug which has a wide spectrum of antihelminthic activity will soon be generally available.

Harvey Blank, M.D.
Professor and Chairman
Department of Dermatology
University of Miami

Adaptation of the Human Botfly: Comments on Dr. Kaye's Article

Dr. Kaye's notes on the implications of his previously reported case of human botfly infestation are refreshing. So much of today's medical literature deals simply with descriptions of observations—reports of derived facts—case narratives. While certainly these are valuable and our entire medical knowledge is based on the free exchange of observed facts, it is not often that an author dares, or is allowed, to "think" in print —to attempt the marriage of independent observations for the synthesis of new facts.

The current report from Dr. Kaye does go this additional important step. He sees in the parasitation by the human botfly a biologic phenomenon entirely foreign to our usual understanding of host-parasite relationships: "It would seem amazing that such a large mass of foreign protein is able to maintain itself in the body without arousing the rejection mechanism. . . ." Correctly he reasons that the explanation of the means whereby the biological neutralization of the host defense mechanisms is brought about would appear to have important implications for man's continual struggle against organ failure. His plea for research is endorsed.

It seems to us that today's scientists are too strongly geared to problem solving and spend too little time pondering the wider implications of their discovered solutions. It is encouraging to read Dr. Kaye's article—a paper concerned more with the potentialities and possibilities of a certain group of facts than simply the reporting of some observations.

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Division of Epidemiology
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Florida State Board of Health
Jacksonville

Why Get Vaccinated Against Smallpox?

Recently, a verified case of smallpox occurred in the United States, the first in many years. This scourge once killed thousands of Americans every year, but is now long gone from this country. It is, however, by no means gone from the world even though an effective vaccine has been available for a long time.

In this era of air travel, someone infected with smallpox may come to this country and infect many others, even before doctors are aware that the disease is back again. Although health authorities require vaccination certificates of all persons entering this country, returning citizens and foreigners alike, a slip-up is always possible. Several smallpox scares have in recent years been precipitated by travelers. The one case this summer was brought in by a traveler from Africa.

In a recent release on health and safety tips the American Medical Association disclosed that, once vaccinated, only a relatively few of the American public keep up the booster schedule which requires boosters every three to five years to maintain protection against smallpox. The level of immunity against the disease in the United States has been shrinking steadily for years, as more and more people neglect to get boosters. Health authorities estimate that at least three fourths of the population is inadequately protected.

The World Health Organization is spurring a concerted drive all over the world in 1965 on behalf of smallpox vaccinations. The disease is increasing in some areas of Asia and in other lands. In the United States today the risk of contracting smallpox is, admittedly, slight, but it is also needless. Vaccination will eliminate this risk entirely.

Association News

American Medical Association 114th Annual Meeting Report of Delegates

The American Medical Association's 114th Annual Convention held June 20-24 in New York City attracted the largest physician registration in the Association's history. Final registration figures reached a grand total of 64,517, which included 24,268 physicians. Dr. Charles L. Hudson of Cleveland, Ohio, was named President-Elect of the Association. He will take office as the 121st AMA President in June 1966, succeeding Dr. James Z. Appel of Lancaster, Pa., who was inaugurated at the Sunday opening session of the House of Delegates. The 1965 AMA Distinguished Service Award was won by Dr. Tinsley R. Harrison of Birmingham, Ala., for his outstanding work in the field of cardiovascular diseases.

The most controversial issue before the House was that of nonparticipation under any so-called Medicare law that might be passed by the Congress. In action on this subject, the House declared that "the physicians of the United States of America pledge themselves to continue their search and activity, in whatever social environment may develop, to secure or to restore the freedom, high quality and availability of medical care which has been traditional in our country." It pledged itself to review, in special session if necessary, the effect of pending measures that become law and take whatever action is deemed necessary. It warned that this action should in no way be interpreted as a change in Section 6 of the "Principles of Ethics" of the Association and reaffirmed the nine principles for standards of health care programs as adopted in its February 1965 special meeting.

In a related action, the House appealed to the government to seek the advice of the medical profession on health legislation. It strongly urged "those branches of the government interested in the formulation, the enactment, and the implementation of laws which deal with the provision of professional medical services to the public to seek and utilize the advice and assistance of the physicians who will render such services," this advice and assistance to be received through the Association's chosen representatives, its officers.

In regard to the President's Commission on Heart Disease, Cancer and Stroke, the House strongly favored the use of available financial support for the extension of existing patterns of research and medical practice rather than replacement by a complex of medical control centers and satellites. It voted to oppose recommendations of the Commission which call for and have stimulated proposals for hastily contrived and unproven sweeping changes in the pattern of medical research, education, and patient care. It urged the component state medical associations to conduct conferences with medical educators and scientists, medical staffs of hospitals, medical society representatives, and other interested groups for the purpose of exchanging information and for the development of appropriate recommendations for continued improvement in these three areas.

Action on the Gunderson Committee report reviewing the size, make-up and functions of the House of Delegates was postponed until the 1965 Clinical Convention in Philadelphia. The Council on Postgraduate Programs submitted a procedure for evaluating the qualifications for a new section and the scientific programs of all sections. The House approved this recommendation.

The House urged medical schools and agencies concerned with continuing education to incorporate "appropriate learning experiences" for physicians in counseling relating to sexual attitudes and behavior. It agreed that hospital medical staffs and state and component medical societies be urged to encourage the establishment, maintenance, and proper use of cancer registries in hospitals but that their establishment should not be made a requirement for accreditation. It reaffirmed its policy concerning the practice of radiology, pathology, anesthesiology and physical medicine in hospitals and also the AMA policy that human blood, as living tissue, should not be purchased under insurance contracts, although certain exceptions may be necessary.

In other miscellaneous actions, the House urged state and local medical societies to encourage the development of the Explorer Scout Program for Medical Specialty Posts. It called for continued efforts to secure the passage of legislation "which will remove tax discrimination against professional people, specifically HR 10(Keogh) and HR 697(Weltner)," but turned down recommendations that the AMA encourage its members to proceed at the state and county levels with the formation of corporations for the purpose of implementing "organized efforts in the courts to remove tax discrimination." It directed the Board of Trustees to review the subject of federal assistance for operating expenses for health or medical education facilities and to study the opportunities and problems associated with Operation Head Start and other programs now operating or planned under the Economic Opportunity Act.

Resolutions urging approval of an American Board of Family Practice were referred to the Council on Medical Education. This Council was urged to establish a standard date of appointment for all approved residency training programs. The House encouraged state and county medical societies to participate in the formation of State Associations of the Professions, "to provide a vehicle, for interprofessional cooperation in those areas where united activity of the various professions can be of great benefit."

Respectfully submitted,
Jere W. Annis, M.D.
Burns A. Dobbins Jr., M.D.
Francis T. Holland, M.D.
Meredith Mallory, M.D.
Reuben B. Chrisman Jr., M.D., Chairman

Deaths

Aldrich, Ellerton Gordon, Sarasota; born in Mineola, Tex., Dec. 20, 1900; University of Michigan Medical School, Ann Arbor, Mich., 1930; interned at Hurley Hospital, Flint, Mich., and in 1933 completed a residency at Jefferson Clinic and Diagnostic Hospital, Detroit, Mich.; engaged in the general practice of medicine in Detroit from 1933 to 1955 and in Sarasota since 1956; particularly interested in youth activities, served as medical adviser for Riverview High School athletic teams and was accompanying the student chorus on a trip when he was fatally injured in a bus-truck collision; died April 28, aged 64.

Boling, Roderic Lee, St. Petersburg; born in Livingston, Mon., May 2, 1912; Indiana University School of Medicine, Indianapolis, 1939; interned at Methodist Hospital, Indianapolis; served with distinction in World War II as a flight surgeon in the Air Force, attaining the rank of major; entered the general practice of medicine in St. Petersburg in 1947 after completing an internship at Mound Park Hospital in that city; held membership in the American Medical Association, Aerospace Medical Association and World Medical Organization; died May 5 following a heart attack, aged 53.

Barnett, Andrew Felix, Tampa; born Feb. 26, 1908, in Ridgeway, Ill.; University of Illinois College of Medicine, Chicago, June 1932; interned at Lake View Hospital, Chicago; spent three years as prison doctor at the Illinois State Penitentiary, Chester, Ill.; from 1936 to 1938 served a residency in orthopedic surgery at Hines Veterans Hospital, Chicago; was chief orthopedist at Anna State Hospital, Anna, Ill., from 1938 to 1940; engaged in the practice of general surgery and orthopedic surgery in West Frankfort, Ill. from 1940 to 1961; in 1962 became associated with Dr. Joseph J. Ruskin in Tampa; held membership in the American Medical Association, American College of Surgeons, International College of Surgeons and American Fracture Association; died March 2 after an illness of more than a year, aged 57.

Drake, Bertrand Francis, Ocala; born Dec. 4, 1875, in St. Louis, Mo.; Cornell University Medical College, New York City, 1905; interned at New York Post-Graduate Hospital, 1905-1907; Yale University School of Public Health, New Haven, Conn., 1932-1934; served as Health Officer and Director of Public Health, New Rochelle, N. Y., from 1932 to 1941; practiced in New Rochelle for 35 years before locating in Ocala in 1941, where he engaged in the general practice of medicine and surgery for 20 years and for two years maintained an office in Dunellon; held membership in the American Medical Association, American Public Health Association, New York Academy of Medicine and New York State Medical Association; was a veteran of World War I; died February 25, aged 89.

Fisher, Roland Frederick, Fort Lauderdale; born in Baraboo, Wis., July 11, 1886; the Johns Hopkins University School of Medicine, Baltimore, 1912; served a two year internship at Washington University Hospital, St. Louis, Mo., and a residency at Barnard Skin and Cancer Hospital, St. Louis; was a veteran of World War I, completing his military duty in 1919 with the rank of captain; practiced general surgery in Wausau, Wis., from 1919 to 1943 and since that time in Fort Lauderdale; was a past president of the Broward County Medical Association and a member of the American Medical Association, Southern Medical Association, Southeastern Surgical Congress and American College of Surgeons; died February 26, aged 78.

Garlington, William Hunter, Ocoee; born in Walnut Grove, Ala., Nov. 13, 1891; University of Louisville School of Medicine, Louisville, Ky., 1921; interned at Hillman Hospital, Birmingham, Ala.; was a veteran of World War I; engaged in the general practice of medicine and surgery in Birmingham for 28 years and in Ocoee for 11 years until ill health forced his retirement; held membership in the American Medical Association and the Alabama State Medical Society; died April 15, aged 73.

Gray, Charles McCurdy, Tampa; born in Baltimore, Md., Jan. 14, 1905; the Johns Hopkins University School of Medicine, Baltimore, 1930; completed a surgical internship at Peter Bent Brigham Hospital in Boston and a residency at Trinity Lutheran Hospital in Kansas City, Mo.; after four years as a general surgeon in Miami, Okla., served a residency in radiology at Georgetown University Hospital, Washington, D. C.; entered the practice of radiology in Tampa in 1938 as an associate of Dr. Joshua C. Dickinson; was the immediate past president of the Hillsborough County Medical Association and a past president of the Florida Radiological Society and the Florida West Coast Radiology Society; on the national level, served as president of the Radiological Society of North America in 1962 and was chairman of its Board of Directors at the time of his death; also served on the Board of Chancellors and as vice president of the American College of Radiology; was a former chairman of the Section of Radiology of the Southern Medical Association; also, held membership in the American Medical Association and the American Roentgen Ray Society and was a diplomate of the American Board of Radiology; died March 11 of multiple myeloma, aged 60.

Kitchens, Festus Earl, Coral Gables; born in Roanoke, Ala., Aug. 28, 1897; University of Tennessee College of Medicine, Memphis, 1924; after completing a fellowship at the Johns Hopkins University School of Medicine, Baltimore, had engaged in the general practice of medicine in Coral Gables since 1926; was a veteran of World War I; held membership in the American Medical Association; died March 21, aged 68.

Lustgarten, Abraham, Miami Beach; born in Riga, Russia, in 1879; Cornell University Medical College, New York City, 1899; was the last living member of the first graduating class of that institution; came to Miami Beach from New York 40 years ago and was one of the early physicians to establish a practice there; having practiced for more than half a century, was an honorary life member of the Dade County Medical Association and of the American Medical Association; died March 16, aged 85.

O'Dell, John Clayton Jr., Bradenton; born in Bainbridge, Ga., Sept. 29, 1908; the Johns Hopkins University School of Medicine, Baltimore, Md., 1931, interned at the Hospital for Women of Maryland, Baltimore, and served a residency in otolaryngology at the Johns Hopkins Hospital from 1932 to 1935 and a residency in ophthalmology at Baltimore Eye, Ear and Throat Charity Hospital from 1952 to 1955; had practiced his specialty in Bradenton since 1957; was a member of the American Medical Association, Johns Hopkins Medical and Surgical Association and American Academy of Ophthalmology and Otolaryngology, and was a fellow of the International College of Surgeons; died April 6, aged 57.

Von Meysenbug, Ludo Rivalier, Melbourne; born in New Orleans, La., Dec. 4, 1892; Harvard Medical School, Boston, Mass., 1917; served a two year internship at Massachusetts General Hospital, Boston, and a two year residency at the University of Minnesota Hospital, Minneapolis; was a veteran of World War I; from 1921 to 1931 was Instructor of Pediatrics at Tulane University School of Medicine, New Orleans, and from 1931 to 1935 was Professor of Clinical Pediatrics at Louisiana State University School of Medicine, New Orleans; practiced pediatrics in Daytona Beach for 18 years and in Melbourne for 10 years; was a past president of the Volusia County Medical Society and of the Florida Pediatric Society; was a former secretary of the Pediatric Section of the Southern Medical Association; was also a member of the American Medical Association and the American Academy of Pediatrics; was a diplomate of the American Board of Pediatrics; died April 2, aged 71.

Winter, Wallace Edwards, Ocala; born in Atlanta, Ga., Sept. 26, 1925; Medical College of Georgia, Augusta, 1947; served an internship and a residency at Orange Memorial Hospital, Orlando, before attending the U. S. Air Force School of Aviation Medicine in 1951; served in the Air Force Medical Corps during 1951 and 1952, attaining the rank of captain; engaged in the general practice of medicine in Augusta for one year, in Madison for four years and in Ocala the last eight years; held membership in the American Medical Association; died May 20 from injuries sustained in an automobile accident in January, aged 39.

Recommended Dosage of Lomotil Liquid to Control Diarrhea

File: Diarrhea

LOMOTIL®

INITIAL LOMOTIL LIQUID DOSAGE*

Age	
3-6 mo.	½ tsp. t.i.d. (3 mg.)
6-12 mo.	½ tsp. q.i.d. (4 mg.)
1-2 yr.	½ tsp. 5 times daily (5 mg.)
2-5 yr.	1 tsp. t.i.d. (6 mg.)
5-8 yr.	1 tsp. q.i.d. (8 mg.)
8-12 yr.	1 tsp. 5 times daily (10 mg.)
Adult	2 tsp. 5 times daily (20 mg.) (or 2 tablets q.i.d.)

*Based on 4 cc. per average teaspoonful.
Note: After diarrhea is controlled the initial dosage can usually be reduced to meet the requirements of the individual patient.

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Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness and insomnia.
Lomotil is a brand of diphenoxylate hydrochloride with atropine sulfate; the subtherapeutic amount of atropine is added to discourage deliberate overdosage.

SEARLE *Research in the Service of Medicine*

News

A 1961 surplus Army jeep recently was presented to the Florida Medical Foundation by Key Buick, Inc. of Jacksonville, for use at the hospital in Trujillo, Honduras. Work at the hospital, which opened July 3, is under the auspices of the Association's Subcommittee on Inter-American Relations and the new Florida Inter-American Foundation. The vehicle was accepted in behalf of the Florida Medical Foundation by its president, Dr. Leo M. Wachtel of Jacksonville. The Subcommittee also received a special award June 18 from the Florida Business and Professional Women's Clubs for "accomplishments in the area of world affairs."

The University of Miami will present a three day seminar December 13-15 entitled "The Geriatric Amputee- Surgery and Prosthetic Rehabilitation." To be held at the Americana Hotel, Bal Harbour, Miami Beach, the seminar will include present concepts in management of peripheral vascular disease, surgery, pre-and postoperative care, prosthetic fitting and training. Further details and applications for traineeships may be obtained by writing Augusto Sarmiento, M.D., Associate Professor of Orthopaedic Surgery, University of Miami School of Medicine, Jackson Memorial Hospital, Miami.

The Second Postgraduate Course on Fractures and other Injuries, sponsored by the American Academy of Orthopaedic Surgeons, will be held October 11-14 at the Riviera Motel, Atlanta. Open to all physicians, the course will carry a registration fee of $75, except to residents, interns and medical students, who will be admitted without charge by a letter from their chiefs of service. Additional details and applications may be obtained by writing Sam W. Banks, M.D., Chairman, Committee on Injuries, American Academy of Orthopaedic Surgeons, 29 East Madison Street, Chicago, Illinois 60602.

The fourth annual Physicians' Seminar on Respiratory Diseases will be held September 18-19 at the Sheraton-Tampa Motor Inn, Tampa. According to program chairman Dr. Charles K. Donegan of St. Petersburg, the program is open to all interested physicians and is acceptable for 11 credit hours by the American Academy of General Practice. Further information may be obtained from the Florida Tuberculosis and Respiratory Disease Association, P. O. Box 10171, Jacksonville 32207.

The American Academy of Pediatrics will hold its 34th annual meeting October 23-28 at the Palmer House, Chicago.

Dr. Samuel P. Martin, provost of the University of Florida's J. Hillis Miller Health Center at Gainesville, has been selected an advisor to the U. S. Office of Economic Opportunity. In this capacity, Dr. Martin will serve among 30 health specialists composing the advisory body.

The First Obstetrics and Gynecology Seminar Cruise, sponsored by the Division of Postgraduate Education, College of Medicine, University of Florida, will be held February 28-March 4, 1966, aboard the S.S. Ariadne cruising Atlantic and Bahama waters.

Dr. John B. Robbins, assistant professor of pediatrics, University of Florida College of Medicine, has been awarded a $20,816 research grant from the U. S. Public Health Service to study disease immunity in young infants.

The fall meeting of the Florida Pediatric Society will be held November 11-14 at the British Colonial Hotel, Nassau, Bahamas.

Dr. Hawley H. Seiler of Tampa recently spent several days in Guayaquil and Quito, Ecuador, at the invitation of the Ecuadorian Society of Chest Specialists and the University of Guayaquil School of Medicine. While in the country, he lectured to various medical groups.

Dr. Walter W. Sackett Jr. of Miami recently addressed the Connecticut State Medical Society and the St. Louis Academy of General Practice.

(Continued on page 584)

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190/102

Hypertension has been called the price of success... and in some life-situations, the cost of failure. In either event, Metatensin lowers blood pressure, cushions the patient against stress and retards the progress of disease. Metatensin is effective and economical. It is well-tolerated over long periods.

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SIDE EFFECTS, PRECAUTIONS, CONTRAINDICATIONS: As used for anxiety and tension, side effects are unlikely. Reversible extrapyramidal reactions may develop occasionally. In higher doses for psychotic disorders, patients may experience excessive drowsiness, visual blurring, dizziness, insomnia (rare), allergic skin reactions, nausea, anorexia, salivation, edema, perspiration, dry mouth, polyuria, hypotension. Jaundice has been exceedingly rare. Photo-sensitivity has not been reported. Blood dyscrasias occur with phenothiazines; routine blood counts are recommended. If symptoms of upper respiratory infection occur, discontinue the drug and institute appropriate treatment. Do not use epinephrine for hypotension which may appear in patients on large doses undergoing surgery. Effects of atropine may be potentiated. Do not use with high doses of hypnotics or in patients with subcortical brain damage. Use cautiously in convulsive disorders.

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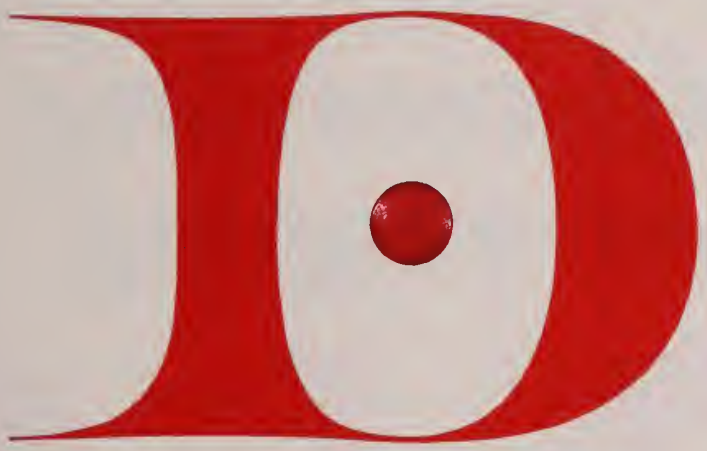

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ACTION: DECLOMYCIN Demethylchlortetracycline is a broad-spectrum antibiotic derived from a strain of *Streptomyces aureofaciens*. Demethylchlortetracycline is closely related chemically to tetracycline and has been shown to have several advantages which make it a valuable aid to antimicrobial therapeutics. It has a greater antibiotic potency which makes it possible to achieve therapeutic activity with less weight of antibiotic. It has a greater stability in body fluids due to a slow degradation. It has been shown to have a reduced renal clearance rate which produces a prolongation of the antibacterial levels in the body.

The average adult daily dose of DECLOMYCIN Demethylchlortetracycline (600 mg.) may be considered to be the equivalent of 1,000 mg. of tetracycline per day.

INDICATIONS: DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines in infections caused by organisms sensitive to the tetracyclines.

The following conditions have been successfully treated:

Abscess	Otitis (Externa or Media)
Acne	Pharyngitis
Bronchiectasis	Pneumonia
Bronchiolitis	Pre- and Postoperative Prophylaxis of Infection
Bronchitis	Primary Atypical Pneumonia
Bronchopulmonary Infection	Primary and Secondary Syphilis
Cellulitis	Pustular Folliculitis
Cystitis	Pyelonephritis
Endometritis	Pyoderma
Erysipelas	Sinusitis
Furunculosis	Streptococcal Sore Throat
Genitourinary Infection	Tonsillitis
Laryngotracheitis	
Mixed Bacterial Infection	
Non-Specific Urethritis	

associated with tetracycline-sensitive organisms such as the following:

Eaton Agent	Gonococci
Endamoeba histolytica	Shigellae
Hemophilus influenzae	Staphylococci
Pneumococci	Streptococci
Escherichia coli	

Evaluation in other infections and conditions is continuing.

DECLOMYCIN Demethylchlortetracycline is indicated for surgical and dental preoperative and postoperative prophylaxis of infection in contaminated fields. Since penicillin is the drug of choice for syphilis and gonorrhea, it should be employed in these infections except in patients with a history of penicillin allergy.

In cases of acute gonococcal urethritis where a primary or secondary lesion of syphilis is suspected, proper diagnostic procedures including darkfield examination should be followed. In all other cases where concomitant syphilis is suspected, serological tests should be made monthly for at least three months.

In patients with agammaglobulinemia or hypogammaglobulinemia and recurring infections, it is necessary to treat with both gamma globulin and an antibiotic such as DECLOMYCIN Demethylchlortetracycline.

DECLOMYCIN Demethylchlortetracycline shows activity against some strains of *Pseudomonas* and *Proteus* heretofore unresponsive to tetracycline therapy as shown by both *in vivo* and *in vitro* studies.

In the treatment of staphylococcus infections, indicated surgical procedures must be performed in all cases.

WARNING: If renal impairment exists, even usual oral or parenteral doses may lead to excessive systemic accumulation of the drug and possible liver toxicity. Under such conditions, lower than usual doses are indicated and if therapy is prolonged, demethylchlortetracycline serum level determinations may be advisable.[1,2,3]

A photodynamic reaction precipitated by direct exposure to natural or artificial sunlight has been observed in some individuals. Small amounts of drug and short exposure to these sources of sunlight may produce an exaggerated sunburn reaction which may range from erythema over the exposed parts of the body to severe skin manifestations. In a smaller proportion, photoallergic reactions to this drug, as well as other tetracycline derivatives, have also been reported.

Such patients should be warned to avoid direct exposure to natural or artificial sunlight while under treatment and to discontinue the drug at the first evidence of skin discomfort.

Necessary subsequent courses of treatment with tetracyclines sh be carefully observed.

PRECAUTIONS AND SIDE EFFECTS: The use of antibiotics occasior may result in overgrowth of nonsusceptible organisms. Constant ob vation of the patient is essential. If new infections appear during ther appropriate measures should be taken.

Demethylchlortetracycline may form a stable calcium complex in bone forming tissue with no serious harmful effects reported thus fa humans. However, use of demethylchlortetracycline during tooth de opment (= last trimester of pregnancy, neonatal period and e childhood) may cause discoloration of the teeth (=yellow-grey-br ish). This effect occurs mostly during long-term use of the drug b has also been observed in usual short treatment courses.

As with all other antibiotics, side reactions which might be enco ered include glossitis, stomatitis, proctitis, nausea, diarrhea, vagi and dermatitis. If adverse reaction or idiosyncrasy occurs, discont medication and institute appropriate therapy. Rare cases of anaph toid reactions have been reported following demethylchlortetracyc Appropriate precaution is advised.

With full therapeutic doses in infants, increased cranial pres with bulging fontanels has been observed. The frequency has rare and all signs and symptoms have disappeared rapidly upon ce tion of treatment.

ADMINISTRATION AND DOSAGE: *ADULT:* The average daily adult age is 4 divided doses of 150 mg. each or 2 divided doses of 300 mg. e

An initial dose of 300 mg. may be used in the more severe infect but a single dose exceeding 300 mg. is thought to be unnecessary.

INFANTS AND CHILDREN: The dosage is 3 to 6 mg. per pound weight per day or 6 to 12 mg. per Kg. per day, divided into 2 or 4 d dependent upon the severity of the disease. This should not be g with milk formula or other calcium containing foods and shoul given at least one hour prior to feeding.

Because of the cumulative effect in the body, continuation of doses beyond the first few days is thought to be unnecessary.

Therapy should be continued beyond the time when character symptoms or fever have subsided; however, DECLOMYCIN Deme chlortetracycline, because of its unique property of prolonged stat in body fluids, permits serum activity for 24 to 48 hours after the dose. The incidence of rheumatic fever or glomerulonephritis follo streptococcal infections suggests that therapy of a streptococcal i tion should be continued for 10 days, even though symptoms subsided.

In the treatment of syphilis a dosage schedule of a total of 12 t Gm. given in equally divided doses over a period of 10 to 15 days sh be followed. Close follow-up observation of the patient is recommen including appropriate laboratory tests, since demethylchlortetracy has not had adequate evaluation in all stages of syphilis. Spinal examination should be included as part of this follow-up.

Primary Atypical Pneumonia (Eaton Agent): The average adult dosage is 900 mg. in 3 divided doses for six days.[4,5,6]

In the treatment of pustular acne vulgaris an initial dose of 600 daily for one or two weeks may, in most cases, be reduced to 300 or 150 mg. daily for remainder of treatment course.[7]

Absorption is impaired by the concomitant administration of calcium content drugs such as some antacid medications, foods some dairy products such as milk. Oral forms of demethylchlortet cline should be given 1 hour before or 2 hours after meals.

REFERENCES

1. Kunin, C. M.; Rees, S. B.; Merrill, J. P. and Finland, M.: Persist of Antibiotics in Blood of Patients with Acute Renal Failure. 1. Tet cline and Chlortetracycline, *J. Clin. Invest. 38*(9):1487-1519 (Sept.) 1 2. Kunin, C. M. and Finland, M.: Restrictions Imposed on Antib Therapy by Renal Failure, *Arch. Int. Med. 104*(6):1030-1050 (Dec.) 1 3. Dowling, H. F. and Lepper, M. H.: Hepatic Reactions to Tetracycl *JAMA 188*(3):307-309 (April 20) 1964. 4. Kingston, J. R.; Chanock, R Mufson, M. A.; Hellman, L. P.; James, W. D.; Fox, H. H.; Manko, M. A Boyers, J.: Eaton Agent Pneumonia, *JAMA 176*:118-123 (April 15) 5. Mufson, M. A.; Manko, M. A.; Kingston, J. R. and Chanock, R Eaton Agent Pneumonia—Clinical Features, *JAMA 178*:369-374 (Oc 28) 1961. 6. Editors: Eaton Agent Pneumonia, *JAMA 178*:414-415 tober 28) 1961. 7. Kanof, N. B. and Blau, S.: Oral Demethylchlor cycline in the Treatment of Pustular Dermatoses, *Antibiotics An* 1959-1960. D48—4/65

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Indications: In depression of any kind—neurotic and psychotic depressive reactions; manic-depressive or involutional psychotic reactions.

Contraindications and Precautions: Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Safety in human pregnancy has not been established.

Adverse Effects: Side effects, usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste," sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs.

Supplied: Norpramin (desipramine hydrochloride) tablets of 25 mg., in bottles of 50, 500 and 1000.

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General Practitioners

GENERAL PRACTITIONER WANTED (AAGP) for north Florida college town. Vacancy in busy two man practice in medicine, pediatrics and obstetrics. Immediate excellent income with eventual full partnership. Write C-614, P.O. Box 2411, Jacksonville, Fla. 32203

WANTED: Associate General Practitioner (AAGP) in a rapidly growing West Coast community of 30,000. New 50 bed community hospital. Contact William H. Hubbard, M.D., P.O. Box 967, New Port Richey, Fla.

GENERAL PRACTITIONER for central Florida city. New 75 bed hospital under construction. Will sell equipment and rent recently remodeled, conveniently located office space. Write Marian Martin, Executrix, Box 665, Haines City, Fla.

GENERAL PRACTITIONER WANTED (AAGP qualification desirable). Excellent opportunity in fastest growing community East Coast. Office available, rent-free to start and other liberal arrangements for qualified and compatible man. To associate with established G.P. Write C-468, P.O. Box 2411, Jacksonville, Fla. 32203

WANTED: General Practitioner for northwest Florida community. Office space available in 32 bed hospital. Write P.O. Box 397, Jay, Florida.

Specialists

PEDIATRICIAN WANTED: To locate in new medical building on West coast of Florida. Write C-651, P.O. Box 2411, Jacksonville, Fla. 32203

WANTED: Pediatrician, ENT, Internist and Dermatologist for new medical building ready Feb. 15. Adjacent to hospital in beautiful location on Gulf of Mexico. Fine practice opportunity. Write C-510, P.O. Box 2411, Jacksonville, Fla. 32203

OBSTETRICIAN - GYNECOLOGIST WANTED: To associate with two man group. Large established practice in Miami; Board eligible or certified; prefer under age 35. Write P.O. Box 384, Miami Shores, Fla.

FLORIDA LICENSED ANESTHESIOLOGIST opening with well established group. Write to Business Manager, P.O. Box 1877, Hollywood, Fla.

WANTED: Board eligible General Surgeon under age 40 for association with two general surgeons in greater Miami area. Florida license required. Write C-646, P.O. Box 2411, Jacksonville, Fla. 32203

WANTED. Young Internist for association with two Internists in S. E. coastal city. Board eligible or certified. Financial arrangements flexible. Write C-649, P.O. Box 2411, Jacksonville, Fla. 32203

Interns, Residents, House Physicians

HOUSE PHYSICIANS: Six required for immediate openings. Accredited voluntary 375 bed general hospital located in the metropolitan area. $600.00 per month plus maintenance. Send resume to Medical Director of St. Mary Hospital, Hoboken, New Jersey —SW 2-3300.

Locum Tenens

WANTED LOCUM TENENS for general practice August 28 to September 28 for vacationing general practitioner. No obstetrics. Housing and transportation available. Contact P.O. Box 669, Melbourne, Fla.

Miscellaneous

GENERAL PRACTITIONER or GENERAL SURGEON for association, suburban Jacksonville. 24-30 first year depending on experience, training and gross, increasing to partnership if desired in three years. Write C-653, P.O. Box 2411, Jacksonville, Fla. 32203.

EQUIPMENT FOR SALE

EQUIPMENT FOR SALE: X-RAY EQUIPMENT, trade-ins, all types and capacities, fully reconditioned, new paint with service guarantee—priced low. HEETHER X-RAY OF FLORIDA. Miami FR 9-4523; Jacksonville EL 6-5781; Tampa 258-4511; Orlando GA 2-2963; W. Palm Beach TE 2-8849.

FOR SALE: Used medical equipment in good condition. Complete lab, some x-ray, physiotherapy, etc. Write P.O. Box 827, Mulberry, Florida. Phone 425-1104.

SITUATIONS WANTED

GENERAL PRACTITIONER: Age 43, Florida license, desires association or group practice in Ft. Lauderdale area. Available September 1, 1965. Write C-644, P.O. Box 2411, Jacksonville, Fla. 32203

GENERAL PRACTITIONER desires relocation in Southeast Coast. Would like to share office with established surgeon or specialist on a rental basis. No lease. Write C-579, P.O. Box 2411, Jacksonville, Fla. 32203.

ESTABLISHED BOARD CERTIFIED GENERAL SURGEON in large Florida city desires association in smaller community. Write C-652, P.O. Box 2411, Jacksonville, Fla. 32203.

REAL ESTATE FOR SALE OR LEASE

MELBOURNE: Office space available in new professional building directly in front of Brevard Hospital. Address inquiries to Madricorp, Inc., 920 Hickory St., Melbourne, Fla.

SETTING UP PRACTICE? Office suite available shopping center location. A-1 rated by First Research Corporation. Excellent potential, opportunity. Write or phone Mr. Yost, P.O. Box 2078, Sarasota, Fla. Ph. 958-6615.

FOR RENT: 1,250 sq. ft. modern, air-conditioned, new, especially built for doctor's office. For lease 804 Margaret St. $250. per month, near 120 bed convalescent home. EV 9-5121, Jacksonville, Fla. 32204

MEDICAL SUITES FOR LEASE. Missouri Medical Center, Clearwater, Florida. Ample parking, centrally located. Floor plan to specification of tenants in new addition. Contact Fred J. Owens, 422 Harbor View Lane, Largo, Florida. Telephone 581-2565.

OFFICE SPACE AVAILABLE on a part-time basis, Kane Concourse, Miami Beach, Florida. An Internist or General Practitioner would be preferred. Phone 865-7177.

AVAILABLE: Ground floor suite, custom built. Completion November. Ideal location, near large hospital. Good parking. See plans. Doctor, P. O. Box 7111, Ft. Lauderdale, Florida.

OFFICE SPACE FOR RENT: New professional building across street from 400 bed hospital. Can be partitioned to individual needs. Rollins Loch Haven Building, 500 E. Rollins Ave., Orlando, Fla. Phone 422-0415.

FOR SALE: Perfect location for clinic and offices in Leesburg, Fla. Corner of very busy intersection, 164 ft. on main Dixie Ave., very busy highway, 82 ft. on busy 9th St. Established professional area surrounded by other doctors, dentists and professionals. Near large municipal hospital. Large 8 room house, central heat-air. Large paved parking lot already built. Priced for immediately sale. Contact William Lipsitz, 616 Dixie Ave. or Box 52, Leesburg, Fla. Phone 787-5738.

FOR SALE: Property zoned business A. Riverside area, Jacksonville. Corner Stockton & Myra. Lot 100 x 125 with 2 two story houses. Near Expressway exits. Mrs. LeGrand & Mrs. George, 2357-63 Myra. Phone EV 8-2084 or EV 7-3935.

WANTED: Doctors interested in investing in groves and acreage. We have groves from 10 acres and acreage from 40 acres up. What do you want? Give us a call and tell us. JARRETT HAMILTON REALTY, Box 1007, Arcadia, Fla. WA 9-5571.

The Florida Medical Association offers placement assistance through the Physician Placement Service, P.O. Box 2411, Jacksonville 32203. This service is for the use of physicians seeking locations, as well as physicians seeking associates and is without charge.

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economical—stable for 2 years, self-contained disposable unit

Side effects are possible but very rare: vesiculation, ulceration or necrosis at test site. Contraindications, none; but use with caution in active tuberculosis. *Available* as the new individually-capped unit, boxes of 5, or in cartons of 25.

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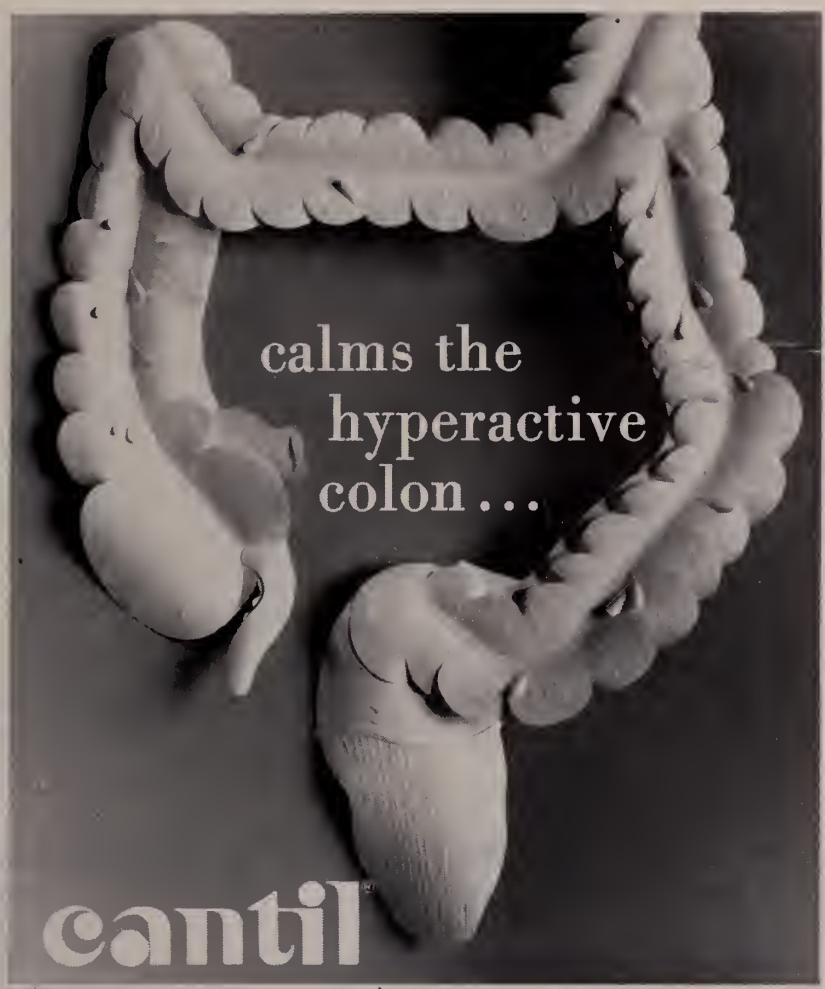

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helps restore normal motility and tone

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- make patients more comfortable

with little effect on stomach, bladder or other viscera.

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects. Blurring of vision or dryness of the mouth were occasionally seen and were usually managed with a reduction in dosage. Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF:

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250.

CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

LAKESIDE LABORATORIES, INC.
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(Continued from page 576)

The Tenth Brazilian Congress of Radiology with the First Portuguese Brazilian Congress of Radiology is being held in Rio de Janeiro September 12-18 at the Hotel Gloria. A special charter flight from Miami will be available, according to announcement by Dr. Manuel Viamonte Jr. of Miami.

A new catalog containing descriptions of 184 motion pictures suitable for lay viewing and pertaining to the health field has been issued by the Pharmaceutical Manufacturers Association, 1155 Fifteenth Street, N.W., Washington, D.C. 20005.

Dr. Richard P. Schmidt, chairman of the Department of Medicine at the University of Florida College of Medicine, Gainesville, has been chosen as president-elect of the American Academy of Neurology.

The second programmed instruction course entitled "Current Concepts of Thyroid Disease" is being made available by Pfizer Laboratories. The first course in the continuing medical education program was "Allergy and Hypersensitivity." Both are available from Pfizer at 235 East 42nd St., New York 17, N. Y.

It has been brought to The Journal's attention that the names of the officers of the Florida Tuberculosis and Respiratory Disease Association appeared incorrectly in the July issue. The current president is Mr. Tom S. Coldewey of Port St. Joe, and the secretary is Mr. J. C. Inman of Orlando. The organization's headquarters office is located at 1417 San Marco Boulevard (P. O. Box 10171), Jacksonville 32207.

Research facilities for studies of the structure of the eye and its diseases will be expanded un-

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der a $77,000 National Institute of Health matching grant to the Bascom Palmer Eye Institute of the University of Miami. The funds will be used to complete the Institute's fourth floor for the electron microscope laboratory, according to Dr. Hayden C. Nicholson, Dean of the School of Medicine.

The Fall Meeting of the Florida Society of Ophthalmology and Otolaryngology will be held at the St. Lucie County Club at Fort Pierce on December 3-5.

Dr. Harold O. Hallstrand of Miami has been elected vice president of the United States Section of the International College of Surgeons. He also will serve as chairman of the Board of Regents. Dr. Merritt R. Clements of Tallahassee will serve with Dr. Hallstrand as assistant treasurer, Dr. Carl S. McLemore of Orlando as assistant secretary, and Dr. Leo H. Wilson Jr. of Sarasota as representative-at-large.

The Ninth Biennial Cardiovascular Seminar, sponsored by the Florida Heart Association, has been scheduled May 19-21, 1966, in Miami.

The 18th annual meeting of the American Association of Blood Banks will be held September 14-17 in Miami Beach.

Dr. Richard T. Farrior of Tampa recently was reelected Southern regional vice president of the American Academy of Facial Plastic and Reconstructive Surgery. During the American Medical Association's 1965 annual meeting in New York, he presented two papers before a joint meeting of the Association's section on Laryngology, Otology and Rhinology, and the Triological Society.

Dr. DeWitt C. Daughtry of Miami recently was elected a governor of the American College of Chest Physicians.

VITH FAILURES

½-year study of 115 patients treated with oral sulfo- drugs, Beaser[1] found that nearly one-half (54) were s—either primary or secondary. Addition of DBI to the ylurea reversed oral treatment failures in 42 cases. This ied therapy "practically doubled the longevity of treat- ossible with oral drugs." Other investigators also report bined therapy:

certain persons with maturity-onset type of diabetes in treatment with a sulfonylurea agent does not yield maxi- ccess, the addition of phenformin [DBI] to the treatment n may result in strikingly improved results."[2]

is "often useful in augmenting an incomplete response of the sulfonylurea drugs."[3]

ients who are sulfonylurea failures may respond effec- the combined therapy [with DBI]."[4]

1 to 3 DBI-TD capsules daily, or 1 to 6 DBI tablets in divided th meals. **Side Effects:** Gastrointestinal, occurring more often at osage levels, abate promptly upon dosage reduction or temporary show "starvation" ketosis (acetonuria without hyperglycemia) which must be differentiated from "insulin-lack" ketosis which is accompanied by acidosis, and treated accordingly. Lactic acidosis has been reported in nondiabetics and diabetics treated with insulin, with diet, and with DBI. Question has arisen regarding possible contribution of DBI to lactic acidosis in patients with renal impairment and azotemia and also those with severe hypotension secondary to myocardial or bowel infarction. Periodic B.U.N. determinations should be made when DBI is administered in the presence of chronic renal disease. DBI should not be used when there is significant azotemia. Any cardiovascular lesion that could result in severe or sustained hypotension, which may itself lead to development of lactic acidosis, should be considered cause for immediate discontinuation of DBI at least until normal blood pressure has been restored and is maintained without vasopressors. Should lactic acidosis occur from any cause, vigorous attempts should be made to correct circulatory collapse, tissue hypoxia, and pH. **Contraindications:** Severe hepatic disease, renal disease with uremia, cardiovascular collapse. Not recommended without insulin in acute complications of diabetes (metabolic acidosis, coma, severe infections, gangrene, surgery). **Pregnancy Warning:** *During pregnancy, until safety is proved, use of DBI, like other oral hypoglycemic drugs, is to be avoided.*

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1. Beaser, S. B.: J.A.M.A. 187:887, 1964. 2. Marble, A.: Appl. Therap. 5:614, 1963. 3. Moss, J. M. et al.: Med. Times 92:645, 1964. 4. Linder, M. et al.:

Butazolidin®
brand of phenylbutazone

in osteoarthritis

Geigy

Therapeutic effects
A number of investigators report improvement in about 75% of cases. Relief of pain and stiffness is the predominant response. Frequently, there is also a significant improvement in function. The beneficial effects of the drug are usually seen by the third or fourth day of treatment.

There is general agreement that milder cases of osteoarthritis are preferably treated by simple analgesics. In many patients, however, this mode of therapy fails to give sufficient relief. Because steroids are not very effective in this form of arthritis, phenylbutazone affords the drug therapy most capable of relieving the more severe cases. For best results, it is recommended that treatment with phenylbutazone be combined with physiotherapy and other appropriate supportive measures.

Dosage
The initial daily dosage in adults is 300-600 mg. in divided daily doses. In most instances, 400 mg. daily is sufficient for maximum therapeutic response. A trial period of one week is adequate to determine the effects of the drug; if there is no improvement, discontinue the drug. When improvement does occur, dosage should be promptly decreased to the minimum effective level: this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

Precautions
Before prescribing, the physician should obtain a detailed history and perform a

should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools. Regular blood counts should be made. The drug should be used with greater care in the elderly.

Warning: If coumarin-type anticoagulants are given simultaneously, the physician should watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea and sulfonamide-type agents and insulin. Patients receiving such concomitant therapy should be carefully observed for this effect.

Side effects
The most common side effects are nausea, edema and drug rash. Infrequently, agranulocytosis, generalized allergic reaction, stomatitis, salivary gland enlargement, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia are also possible side effects. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently.

Contraindications
These include: edema, hypertension, or

history of blood dyscrasia. Becaus
increased possibility of toxic react
drug should not be given when the
cannot be seen regularly, when the
patient is senile, or when other pot
chemotherapeutic agents are give
currently. Large doses of Butazoli
are contraindicated in patients wit
glaucoma.

Note: The physician should be full
of dosage, precautions, side effect
contraindications as contained in
complete prescribing information.

Butazolidin alka

Each capsule contains:
Butazolidin, brand of phenylbutazone
dried aluminum hydroxide gel
magnesium trisilicate
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Butazolidin
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Tablets of 100 mg.

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Contraindications: Hypersensitivity to any ingredient. Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use. Side effects: Side effects are uncommon—nausea, constipation and drowsiness have been reported. ●●●●●●●●●●●●●●

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There's nothing like a vacation*
for relaxing stress-induced smooth muscle spasm

nothing, that is, except the

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Functional disturbances of gastrointestinal tone and motility present the physician with an all too common reaction to the stressful dilemmas and frustrations of modern living.[3,6]

For their dependable control, no better spasmolytic has ever been discovered than the *natural* belladonna alkaloids in combination with phenobarbital, as in DONNATAL.

Phenobarbital, as a mild sedative, has the benefit of long use and a reassuring record of freedom from unexpected and untoward reactions. In allaying subjective tension, it helps to prevent emotional stimuli from provoking or intensifying visceral spasm.

The *natural* belladonna alkaloids in DONNATAL—conforming to the classic formulation by Vollmer[5]—selectively include only the therapeutically desired alkaloids in precisely and optimally balanced ratio. The clinical uncertainties of the variable tincture and extract of belladonna are thus avoided.

Further, a recent pharmacological study has confirmed that the antispasmodic effectiveness of the belladonna alkaloids in DONNATAL is measurably potentiated by the presence of phenobarbital.[8]

Over the years, the professional consensus has reflected broad clinical confidence in the marked benefits to be achieved by DONNATAL in a wide range of visceral disorders . . . in peptic ulcer,[1,6] functional bowel distress,[1] gastrointestinal spasm and discomfort,[2] and other functional disturbances of visceral smooth muscle.

CONTRAINDICATIONS: Glaucoma, advanced renal or hepatic disease or hypersensitivity to any of the ingredients.
PRECAUTIONS: Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction as in prostatic hypertrophy.
SIDE EFFECTS: Blurring of vision, dry mouth, difficult urination or flushing and dryness of the skin may occur at higher dosage levels, rarely at the usual dose.

*This one at Oak Creek, Castle Rock, Arizona

References: 1. Hock, C. W.: Clin. Med. 8:1932, 1961. 2. Marks, L.: Am. J. Gastroenterol. 27:180, 1957. 3. Palmer, W. L., and Kirsner, J. B.: Therapeutics in Internal Medicine, 2nd ed., F. A. Kyser, Ed., Hoeber, New York, 1953, p. 368. 4. Ryan, J. P., Jenkins, H. J. and Robinson, S. M.: J. Pharmaceut. Sciences 53(9):1084, 1964. 5. Vollmer, H.: Arch. Neurol. & Psychiat. 43:1057, 1940. Abst. J.A.M.A. 115:333, 1940. 6. Wharton, G. K., Balfour, D. C., Jr., and Osman, K. I.: Postgrad Med. 21:406, 1957.

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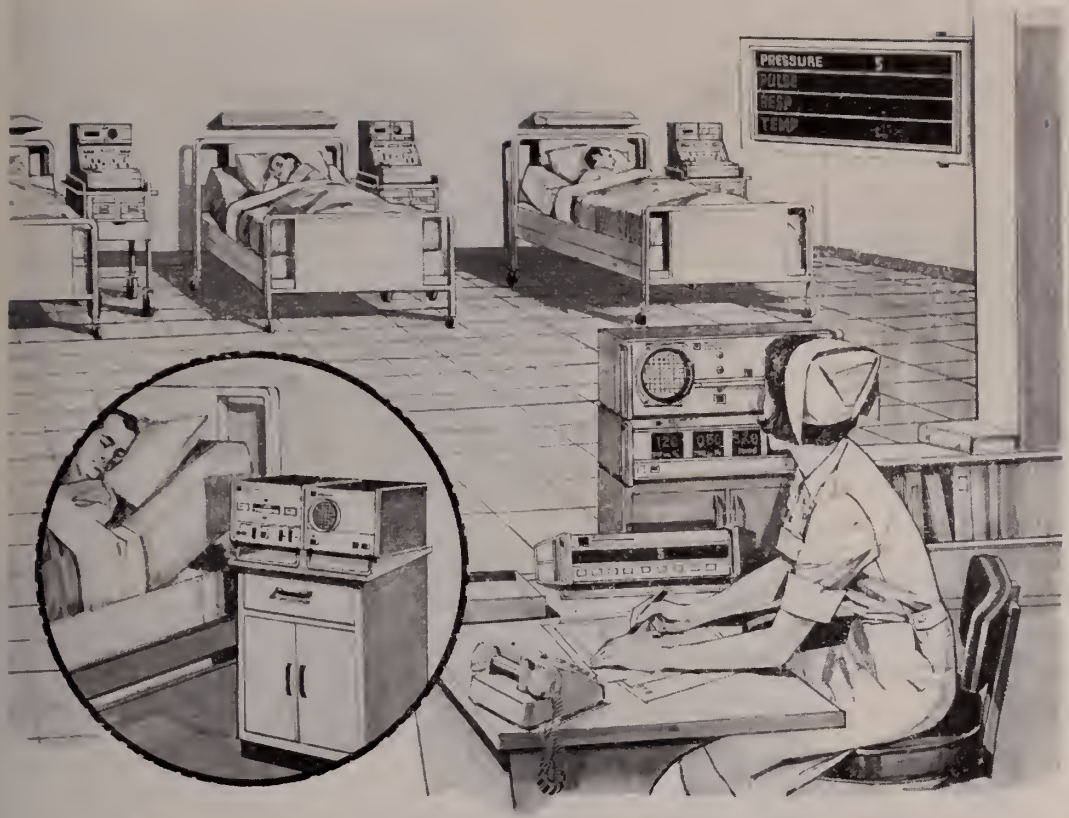

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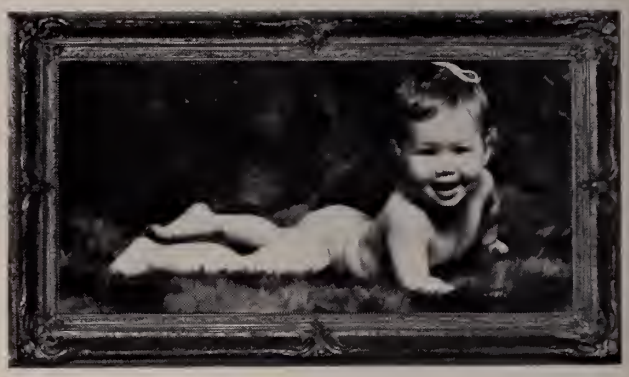

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1—Pomeranze, J., and Gadek, R.J.: Am. Pract. & Digest Treat. *8*:73-77 (Jan.) 1957
2—Asher, L.M.: Am. J. Digestive Diseases *4*:272 (Apr.) 1959

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References:

1. Schwarz, A.J.F.: Amer. J. Dis. Child., **103:** 386-389, 1962.
2. Krugman, S. et al.: Pediatrics, **31:** 919-928, 1962.
3. Andelman, S. L. et al.: J.A.M.A., **184:** 721-723, 1963.
4. Measles Vaccines: W.H.O. Technical Report Series No. 263, 1963.
5. Schwarz, A.J.F.: Annales Paediatrici, **202:** 241-253, 1964.
6. Morley, D. C. et al.: Bull. W.H.O., **30:** 733-739, 1964.
7. Andelman, S. L. et al.: Scientific exhibit at annual meeting of The American Academy of Pediatrics, 1964.
8. Krugman, S. et al.: J. Pediatrics, **66:** 471-488, 1965.

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*Done, A. K., in Drugs of Choice 1964-1965, Modell, W., ed., St. Louis, The C. V. Mosby Co., 1964, p. 66.

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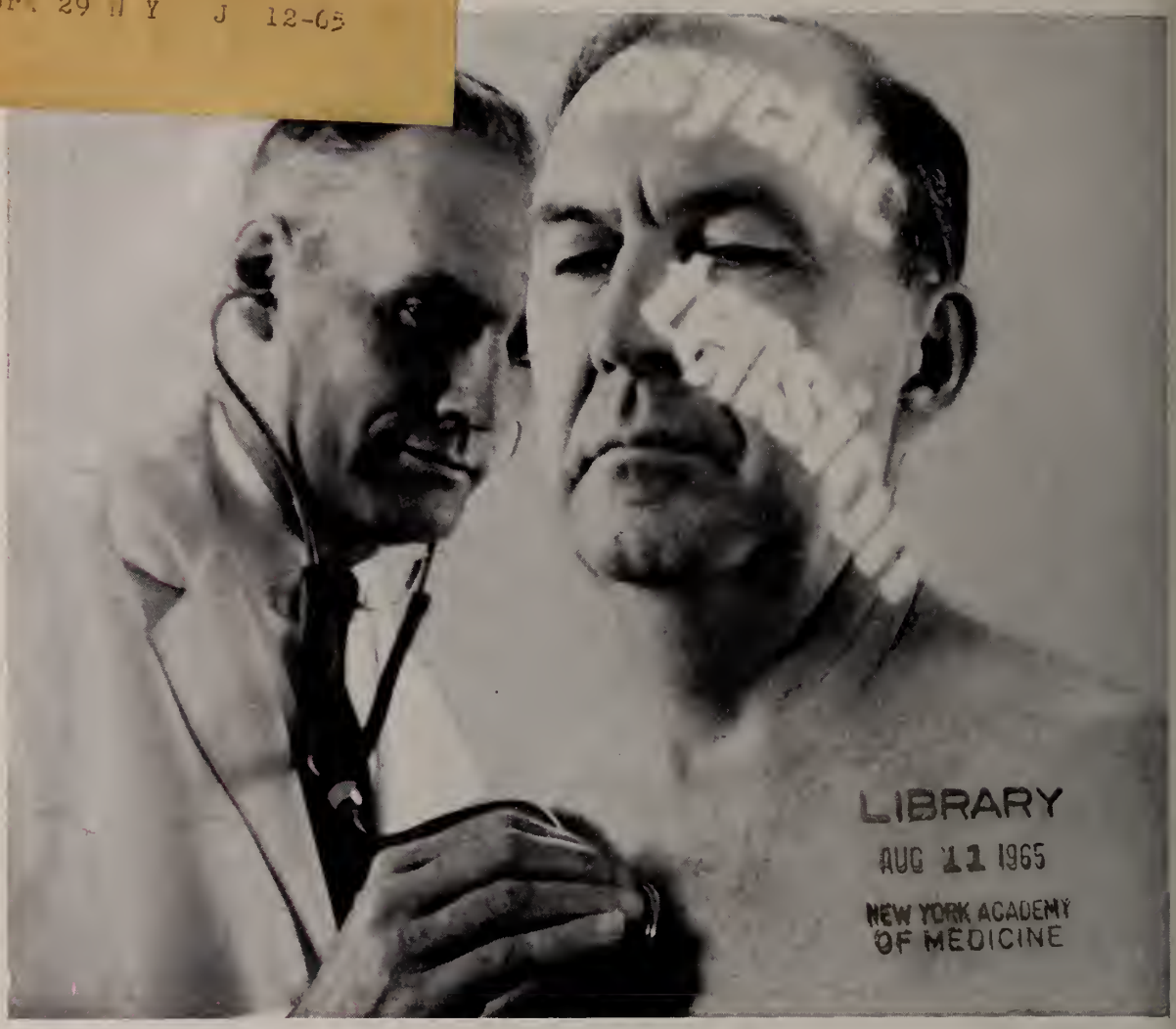

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Contraindications: Infants, patients with history of convulsive disorders or glaucoma.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazardous procedures until correct maintenance dosage is established; driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warn patients of possible combined effects with alcohol. Safe use in pregnancy not established. Observe usual precautions in impaired renal of hepatic function and in patients who may be suicidal; periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances and hallucinations) and changes in EEG patterns. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

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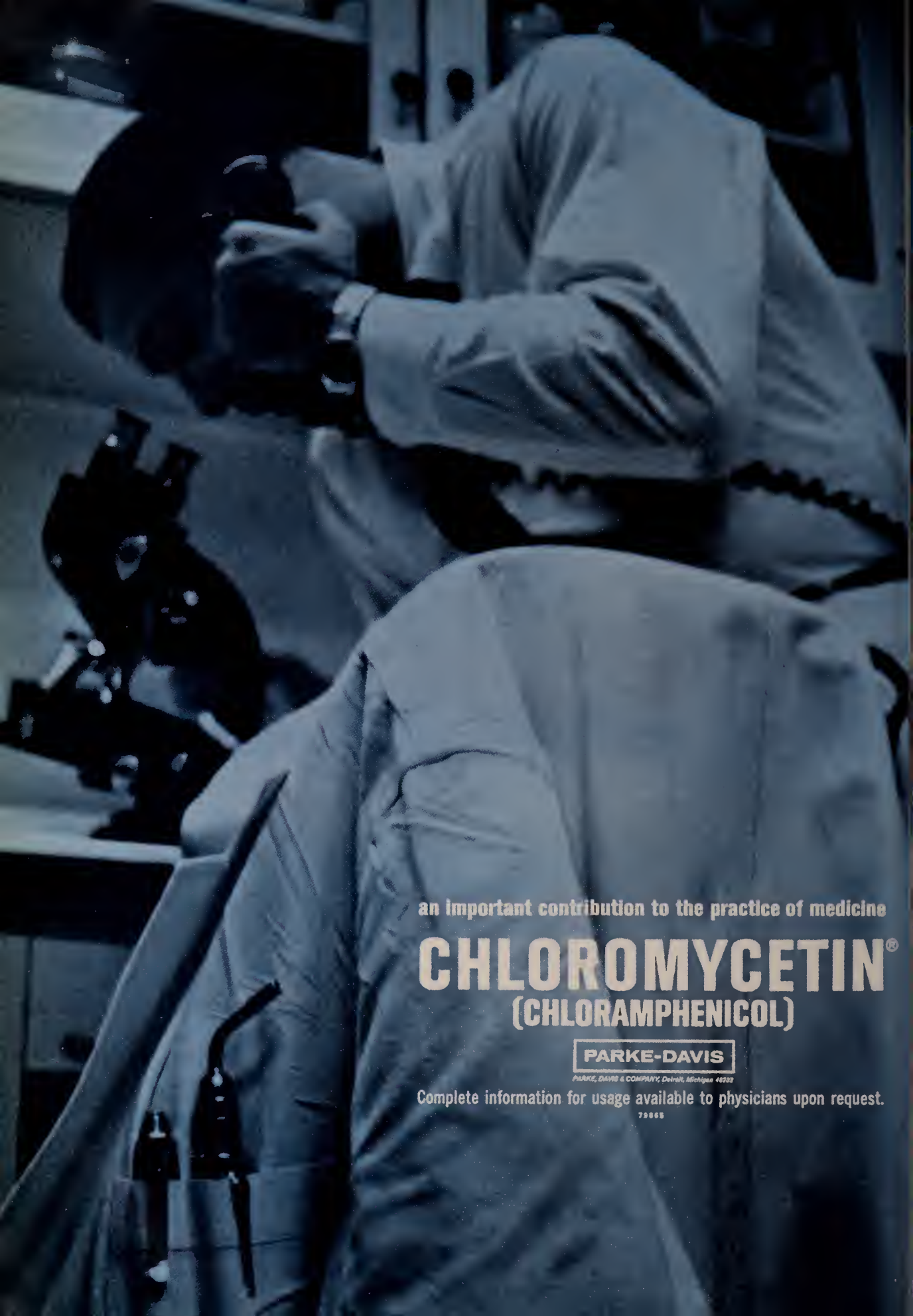
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AND THREATENED

AND HABITUAL ABORTION

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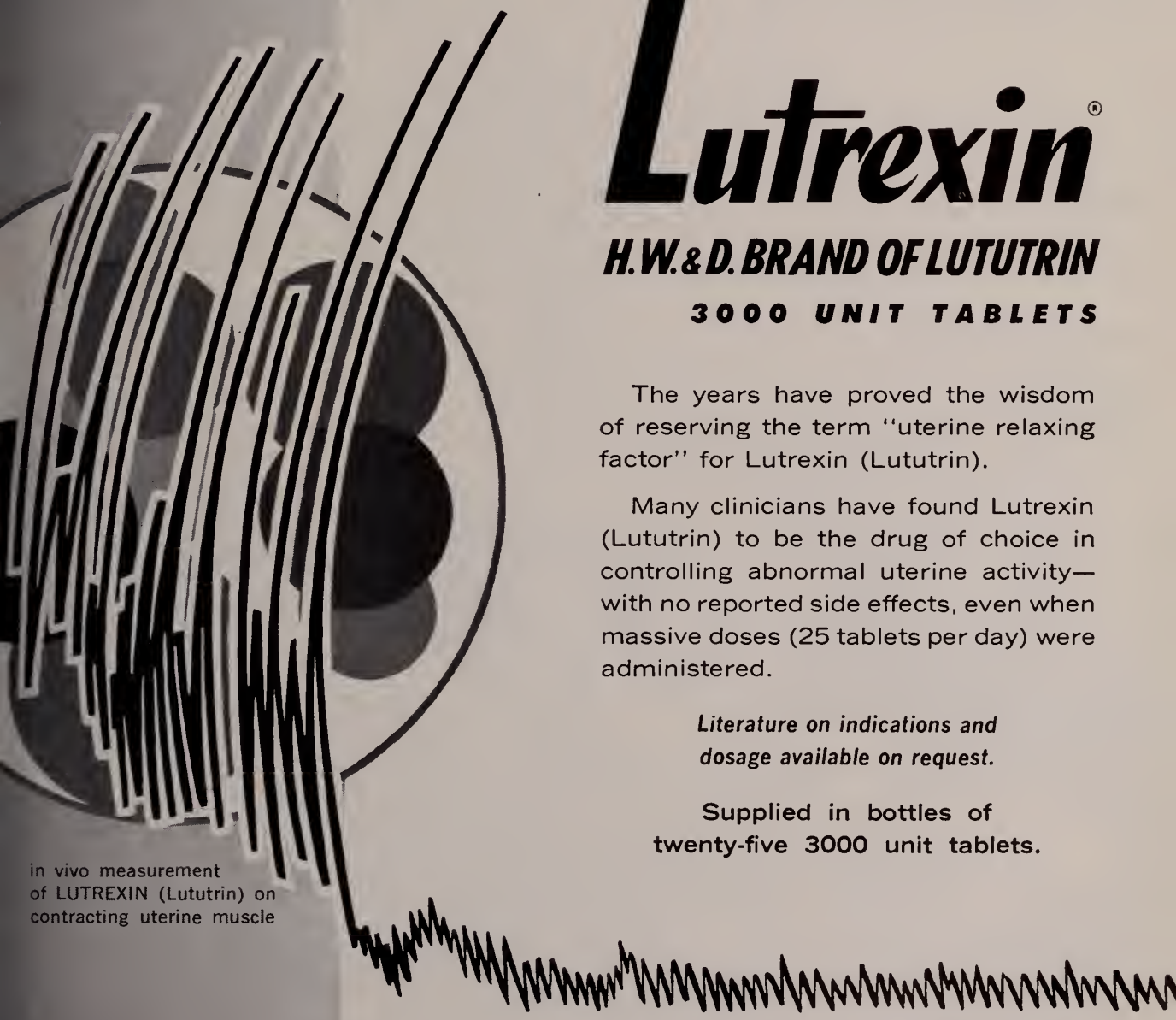
3000 UNIT TABLETS

The years have proved the wisdom of reserving the term "uterine relaxing factor" for Lutrexin (Lututrin).

Many clinicians have found Lutrexin (Lututrin) to be the drug of choice in controlling abnormal uterine activity—with no reported side effects, even when massive doses (25 tablets per day) were administered.

Literature on indications and dosage available on request.

Supplied in bottles of twenty-five 3000 unit tablets.



in vivo measurement of LUTREXIN (Lututrin) on contracting uterine muscle

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NTZ Nasal Spray relieves hay fever symptoms on contact

Fast symptomatic relief from seasonal hay fever comes in the convenient NTZ Nasal Spray bottle. Two sprays quickly relieve itching and decongest the nasal membranes on contact. The first spray of NTZ shrinks the turbinates, helps restore normal nasal ventilation and breathing. After a few minutes a second spray enhances sinus ventilation and drainage.

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NTZ is supplied in leakproof, pocket-size, spray bottles of 20 ml. and in bottles of 30 ml. with dropp

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Hay fever... a summer hazard prescribe NTZ® Nasal Spray

The JOURNAL
of the Florida Medical Association

Volume 52, Number 9, September 1965

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especially in diabetics or debilitated patients

and in patients with a history of fungal overgrowth—during pregnancy—patients on steroids who require antibiotics—the elderly. The antimonilial specificity of Nystatin plus the extra benefits of DECLOMYCIN Demethylchlortetracycline allow lower mg intake per dose per day, the option of b.i.d. dosage, higher activity levels, 1-2 days' "extra" activity.

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Metahydrin® (trichlormethiazide) 2 mg. or 4 mg. Reserpine 0.1 mg.

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for those who are...

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Side Effects: Occasional allergic skin reactions may occur with meprobamate, accompanied by fever, nonthrombocytopenic purpura, angioneurotic edema, hypotension, or bronchial spasm. Drowsiness with or without ataxia and/or alteration in visual accommodation may occur. Effects of alcoholic beverages may be increased by meprobamate. Use with caution in patients with coronary or cardiovascular disease or severe hypertension. Prolonged use may result in dependence. Reactions can occur if drug is not withdrawn gradually.

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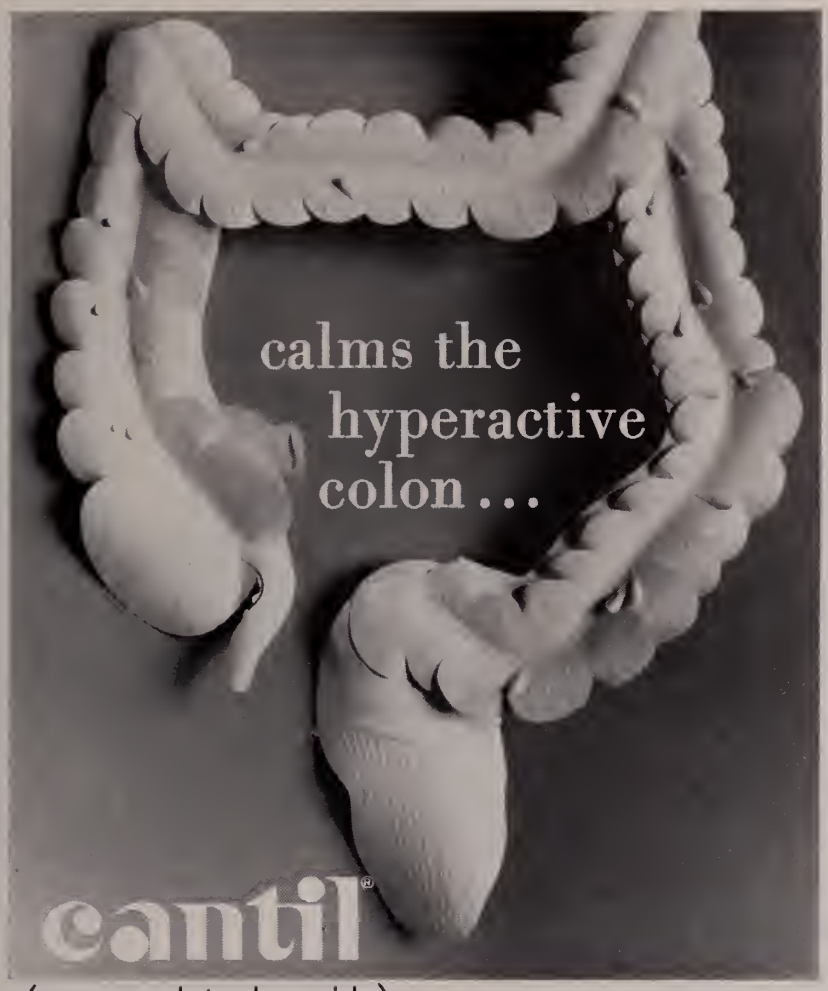

(mepenzolate bromide)

helps restore normal motility and tone

Cantil (mepenzolate bromide) works in the colon. In irritable colon, spastic colon, ulcerative colitis and other functional and organic colonic disorders, it acts to:

- control diarrhea/constipation
- relieve spasm, cramping, bloating
- make patients more comfortable

with little effect on stomach, bladder or other viscera.

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects. Blurring of vision or dryness of the mouth were occasionally seen and were usually managed with a reduction in dosage. Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF:

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250.

CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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a rapid lift from the hell of depression

Doré Illustration
from
Dante's Inferno

often relieves mental pain in 2-5 days

NORPRAMIN®
(desipramine hydrochloride)

Norpramin is a rapid-acting specific drug for the treatment of depression. Depressive signs and symptoms—sometimes described as "mental pain"—typically begin to improve in 2-5 days. Patients are more hopeful, less empty and less weighed down by their troubles. Norpramin has only slight sedative qualities, nevertheless anxiety *secondary to depression* is frequently relieved as depression is lifted. If anxiety or tension persists it can be controlled by adding a tranquilizer or by reducing dosage. Norpramin is not a MAO inhibitor. Side effects are usually mild.

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Optimal results are obtained at a dosage of about 150 mg./day—two 25 mg. tablets t.i.d. After achieving optimal results, a maintenance dose (50-100 mg./day) should be sought.

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IN BRIEF:

Indications: In depression of any kind—neurotic and psychotic depressive reactions; manic-depressive or involutional psychotic reactions.

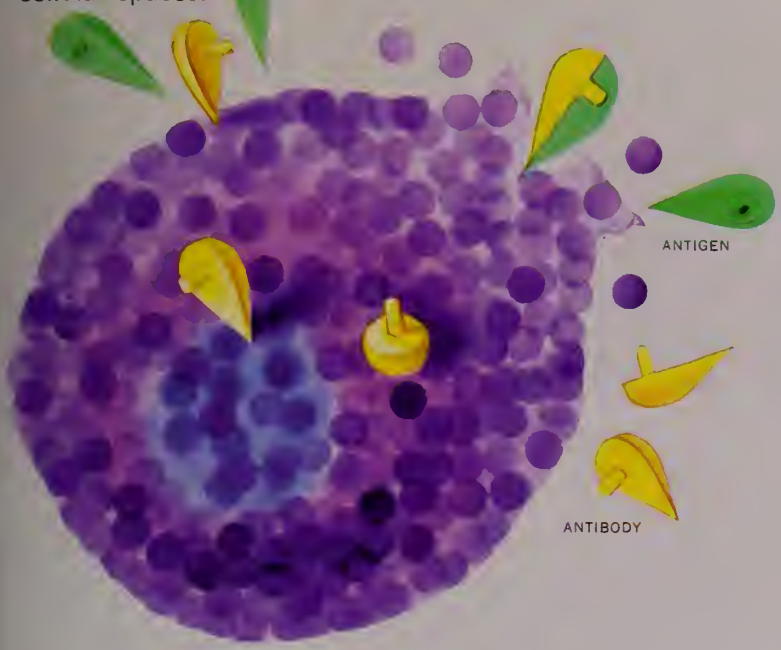
Contraindications and Precautions: Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Safety in human pregnancy has not been established.

Adverse Effects: Side effects, usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste," sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs.

Supplied: Norpramin (desipramine hydrochloride) tablets of 25 mg., in bottles of 50, 500 and 1000.

in theory, allergy begins like this:

When antigens invade the body, antibodies, formed chiefly by plasma cells, may become attached to mast cells. If the same antigen reappears and reacts with the antibodies, the mast cell disrupts (as pictured below). Subsequently, the "exploding" mast cell deposits granules of bound histamine or histamine-like substance in intercellular spaces.



in allergy, Dimetane® Extentabs®

(brompheniramine maleate, 8 mg. & 12 mg.)

work with no more sedation than placebo*

Although the mechanisms of allergy are still theoretical, the response to Dimetane (brompheniramine maleate) is ample proof that a good antihistamine can, and does, work — and (as reported in one investigation*) with no more sedation than placebo. Dimetane (brompheniramine maleate) assures your allergy patients prompt relief of symptoms while usually permitting them to lead active, alert lives. And a single Extentab provides continuous action for up to 10-12 hours.

*Schiller, I.W. and Lowell, F.C.: New England J. Med. *261*:478, 1959.

BRIEF SUMMARY: *Contraindications:* Hypersensitivity to antihistamines. Not recommended for use during pregnancy. *Precautions:* Until response is determined, patient should be cautioned against engaging in mechanical operations requiring alertness. *Side Effects:* Hypersensitivity reactions, including skin rashes, urticaria, hypotension, and thrombocytopenia have been reported rarely. Occasional transitory drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered. *Other dosage forms available:* conventional tablets (4 mg.); Elixir (2 mg./5 cc.); Injectable (10 mg./cc. ampuls, and 100 mg./cc. in 2 cc. vials).

A. H. ROBINS CO., INC.
Richmond, Virginia 23220

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basic therapy in low-back pain: bed, board, heat

Whether low-back pain is in the chronic or acute phase, the appropriateness of bed rest for such a patient is beyond controversy. Boards placed under the mattress, for a firmer bed to further immobilize the spine, are another common recommendation. And most investigators consider heat beneficial—moist heat in particular.[1-5]

and Robaxin®-750

(methocarbamol 750 mg.)

(CAPSULE-SHAPED TABLETS)

It has been noted that low-back disorders frequently "...are caused by truly mechanical conditions which yield to conservative treatment."[1] Basic to this conservative treatment are bed rest, a board for the bed, and applied heat. In addition, a good muscle relaxant is often helpful, as "...muscle relaxants are useful in chronic as well as acute low backaches."[4]

Robaxin (methocarbamol) has relieved spasm and pain in cases where the patient "had not responded to conservative measures prior to drug therapy."[6] A 100-patient study showed that Robaxin provided greater relief of muscle spasm for a longer period of time without adverse reactions "than any other commonly used relaxants...."[6]

A well-tolerated[7] skeletal muscle relaxant with "specificity of action,"[7] methocarbamol leaves normal muscle tone unaffected. Moreover, there is little likelihood of sedation[7]—a considerable advantage for the patient who must remain active and alert on his job.

Significantly, clinicians advise using a muscle relaxant "early and in adequate dosage."[8] In this regard, Robaxin (methocarbamol)—*particularly in the 750 mg. dosage (2 tabs. q.i.d.)*—offers optimal therapeutic benefits without a significantly increased incidence of side effects. And just as it works well as part of the basic regimen for low-back pain, so also does Robaxin (methocarbamol) often provide muscle relaxation in such conditions as musculoskeletal injury, chronic neurological disorders, and orthopedic situations.

BRIEF SUMMARY—Robaxin (methocarbamol) Tablets: Contraindicated in hypersensitive patients. Side effects (light-headedness, dizziness, drowsiness, nausea) may occur rarely, but usually disappear on reduced dosage. Hypersensitivity reactions develop infrequently.

ALSO AVAILABLE: Robaxin® Tablets (methocarbamol, 500 mg.) Robaxin Injectable (methocarbamol, 1 Gm./10 cc.)
Robaxisal® (methocarbamol with aspirin) and Robaxisal-PH Tablets (methocarbamol with Phenaphen®).

REFERENCES: 1. Soto-Hall, R.: Med. Sci. *14*:23, 1963. 2. McCarrol, H.R.: Paper read at the Annual Meeting of the American Medical Association, Atlantic City, June 16-20, 1963. See Medical News: J.A.M.A. *185*:39 (July 13), 1963. 3. Gordon, E.J.: Med. World News *5*:54, 1964. 4. Cozen, L.: GP *26*:82, 1962. 5. Larson, C.B.: Postgrad. Med. *26*:142, 1959. 6. Forsyth, H.F.: J.A.M.A. *167*:163, 1958. 7. Weiss, M., and Weiss, S.: J. Amer. Osteopath. Ass. *62*:142, 1962. 8. Rowe, M.L.: J. Occup. Med. *2*:219, 1960.

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when a change in environment overwhelms him with anxiety

Failing health, financial difficulties, or the death of a spouse are among the reasons why elderly people may be obliged to leave their familiar surroundings. Moving in with children or entering a home for the aged may satisfy practical requirements but can be psychologically traumatic since emotional resilience tends to diminish with age.

Even when anxiety reaches overwhelming proportions, you can counteract it promptly with the potent tranquilizer—Atarax (hydroxyzine HCl).

The outstanding systemic safety record of Atarax makes it particularly suitable for geriatric patients whose drug tolerance is often low. The usual initial dosage in such patients is 50 mg. q.i.d. However, this tranquilizer is so well tolerated that dosage can be adjusted to meet individual requirements. The wide variety of dosage forms allows flexibility of administration from any standpoint—convenience, patient preference, or emergency requirements.

No age, of course, is exempt from anxiety and any nu ber of circumstances can unleash it. Keep Atarax mind for *all* your emotionally distressed patients—fr under 6 to over 60.

for any age—for any stage of anxie

Rx **ATARAX**® (hydroxyzine HCl) tablets syrup parenteral

...In any condition where tissue depletion of the wat soluble vitamins is found, Rx **RoeriBeC**® therapeuti complex with 500 mg. of vitamin C.

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Science for the World's Well-Being®
New York, New York 10017

Side effects and precautions: The transitory drowsiness which may occur with hydroxyzine HCl usually disappears spontaneously in a few days with continued therapy, or is correctable by dosage reduction. Dryness of the mouth may be seen with higher doses. Involuntary motor activity has been reported in hospitalized patients on higher than recommended doses. Hydroxyzine HCl may potentiate CNS depressants, narcotics such as meperidine, barbiturates, and anticoagulants. In conjunctive use, dosage for these drugs should be decreased. Because drowsiness may occur, patients should be cautioned against driving a car or operating dangerous machinery. **Parenteral Solution Precautions and contraindications:** This dosage form is intended only for I.M. or I.V. administration and should not, under any circumstances, be injected subcutaneously or intra-arterially. When the usual precautions for I.M. injection have been followed, reports of soft tissue reactions have been rare. I.V. administration should be slow, no faster than 25 mg. per minute, and should not exceed 100 mg. in any single dose. Particular care should be used to insure injection only into intact veins; a few instances of digital gangrene occurring distal to the injection site have been attributed to inadvertent intraarterial injection or periarterial extravasation, both of which should be avoided. **More detailed professional information available on request.**

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A white vanishing cream

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Sizes 5 cc. and new 15 cc.

The ear drop of the year. Combining:

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Neomycin Sulfate	5mg
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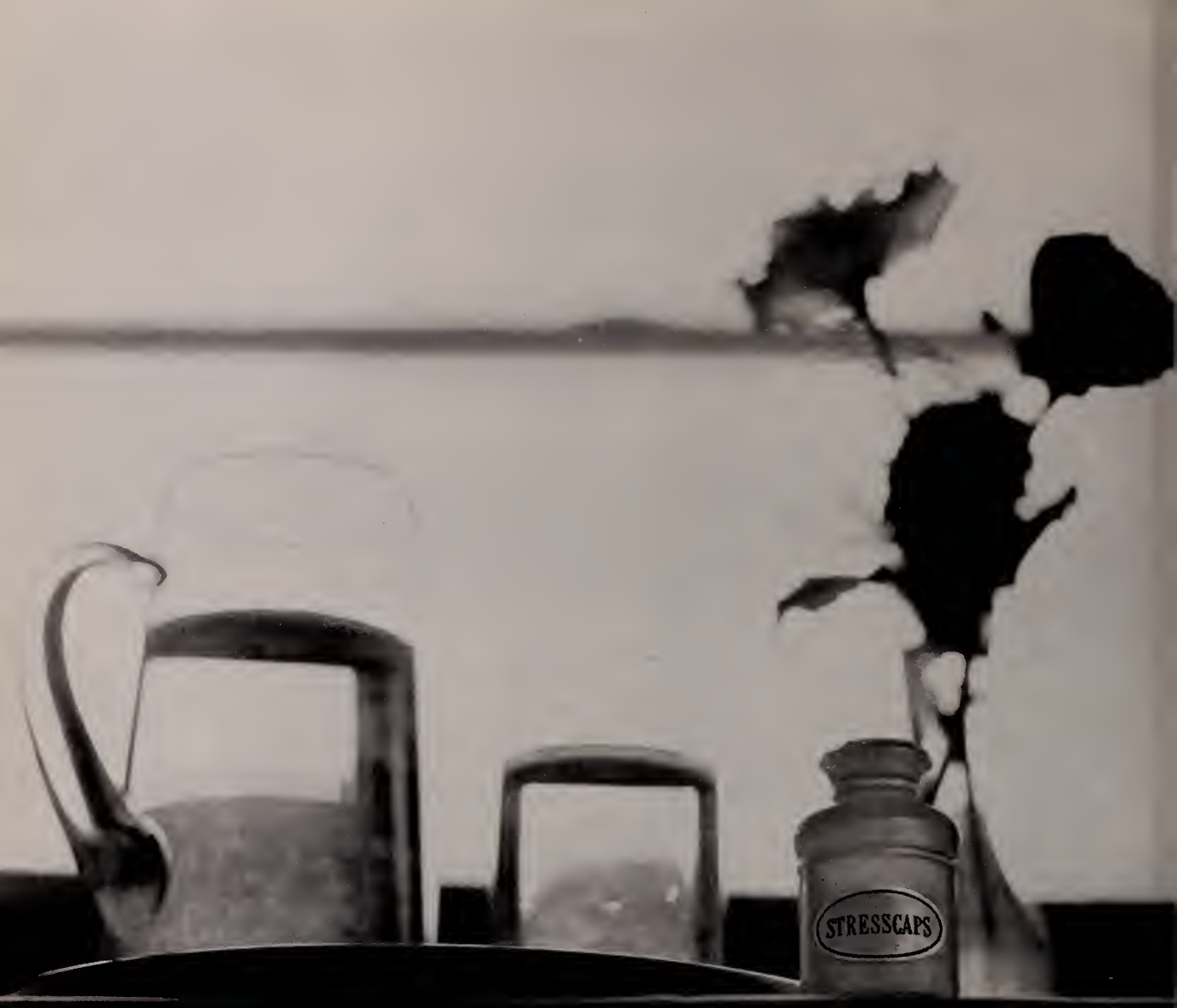

following infection

STRESSCAPS B and C vitamins in therapeutic amounts...help the body mobilize defenses during convalescence...aid response to primary therapy. The patient with a severe infection, and many others undergoing physiologic stress, may benefit from STRESSCAPS.

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FOR PROFESSIONAL RECOMMENDATION ONLY

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Each capsule contains:

Vitamin B_1 (as Thiamine Mononitrate)	10 mg.
Vitamin B_2 (Riboflavin)	10 mg.
Niacinamide	100 mg.
Vitamin C (Ascorbic Acid)	300 mg.
Vitamin B_6 (Pyridoxine HCl)	2 mg.
Vitamin B_{12} Crystalline	4 mcgm.
Calcium Pantothenate	20 mg.

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 (one month's supply) and 100 (three months' supply).

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approximating the diuretic efficacy of meralluride

METAHYDRIN®

(trichlormethiazide)

To determine the relative efficacy of thiazide diuretics in congestive heart failure, Metahydrin (trichlormethiazide) and three other thiazides were measured against Mercuhydrin® (meralluride injection)—the standard diuretic. "The results leave little doubt that the diuretic efficacy, that is, the 'ceiling effect' in these terms, is not the same for different thiazides."* The assays ranged from about 40% of the effectiveness of Mercuhydrin through 67%, 77% to 90% for Metahydrin. The latter two values were thought to be significantly different from the lowest value and to be therapeutically important.

*Gold, H., *et al*: Closed Panel Conference: Present Status of the Management of Congestive Failure and Advances in Diuretic Therapy, Journal of New Drugs, 1:177, July-August, 1961.

LAKESIDE LABORATORIES, INC.
Milwaukee, Wisconsin 53201

IN BRIEF: ADMINISTRATION AND DOSAGE: One 2 mg. or 4 mg. tablet once or twice daily. In acute, severe decompensation, Mercuhydrin® (meralluride injection) may be necessary initially.

PRECAUTIONS: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

SIDE EFFECTS: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have been occasionally noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by administration of thiazides.

CONTRAINDICATIONS: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

HOW SUPPLIED: Bottles of 100 and 1000 tablets.

a working analgesic for the working arthritic

Arthralgen® rapidly relieves early morning stiffness and arthritic pain. It promises a quicker response in most patients because its analgesic ingredients need no metabolic conversion before they act. Combining two better-tolerated, time-tested analgesics, acetaminophen and salicylamide, into a pharmacologically sound and therapeutically effective formulation, Arthralgen relieves pain rapidly with less likelihood of gastric irritation than aspirin.

in maintenance therapy ...

Because it contains no sodium, Arthralgen is often a safer and more suitable analgesic for use in the long-term treatments of arthritic patients who have other conditions which require sodium restriction.[1]

Arthralgen®

Each tablet contains:

Salicylamide	250 mg.
Acetaminophen	250 mg.
Ascorbic acid (Vitamin C)	25 mg.

Arthralgen®-PR

(Arthralgen with prednisone 1 mg.)

BRIEF SUMMARY:

Arthralgen and Arthralgen-PR are indicated in the management of rheumatoid arthritis, acute gouty arthritis, rheumatoid spondylitis, osteoarthritis, bursitis, fibrositis, and neuritis. Arthralgen may be used for analgesia in colds, flu, and various myalgias.

CONTRAINDICATIONS: Hypersensitivity to any ingredient.

As with any drug containing prednisone, Arthralgen-PR is contraindicated, or should be administered only with care, to patients with peptic ulcer, tuberculosis, nephritis, diabetes mellitus, acute psychoses, Cushing's syndrome (or Cushing's disease), overwhelming spreading (systemic) infection, or predisposition to thrombophlebitis.

Arthralgen-PR is generally contraindicated in patients with uremia and viral infections, including poliomyelitis, vaccinia, ocular herpes simplex, and fungus infections of the eye. It is also contraindicated in patients with chickenpox or susceptible persons exposed to it.

PRECAUTION: Reduction in dosage of Arthralgen-PR given over a long period should be gradual, never abrupt.

SIDE EFFECTS: Nausea, GI upset, or mild salicylism may rarely occur. Symptoms of hypercorticoidism dictate reduction of dosage of Arthralgen-PR.

DOSAGE: One or two tablets four times a day. After remission of symptoms dosage should be reduced to the minimum maintenance level.

REF: 1. Boreus & Sandberg, ACTA. PHYSIOL. SCAND., 28:266, 1953.

A. H. ROBINS COMPANY, INCORPORATED RICHMOND, VIRGINIA

when even southern sun fails to warm cold hands and feet

provide rapid, sustained vasodilation for warmth and relief of pain, dizziness and faintness in patients with impaired peripheral circulation

GERILIQUID warms cold hands and feet through the thermogenic action of glycine and through sustained vasodilation by glycine and niacin. In addition, in patients with impaired peripheral circulation, GERILIQUID increases the ability to walk farther with less pain. Patients particularly like the palatable, sherry wine base.

IN BRIEF: Composition: Each 5 ml. contains: niacin 75 mg. and aminoacetic acid (glycine) 750 mg. in a palatable sherry wine base; alcohol 5%.

Side Effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is concomitant administration of a coronary vasodilator.

Administration and Dosage: One or two teaspoonfuls 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation.

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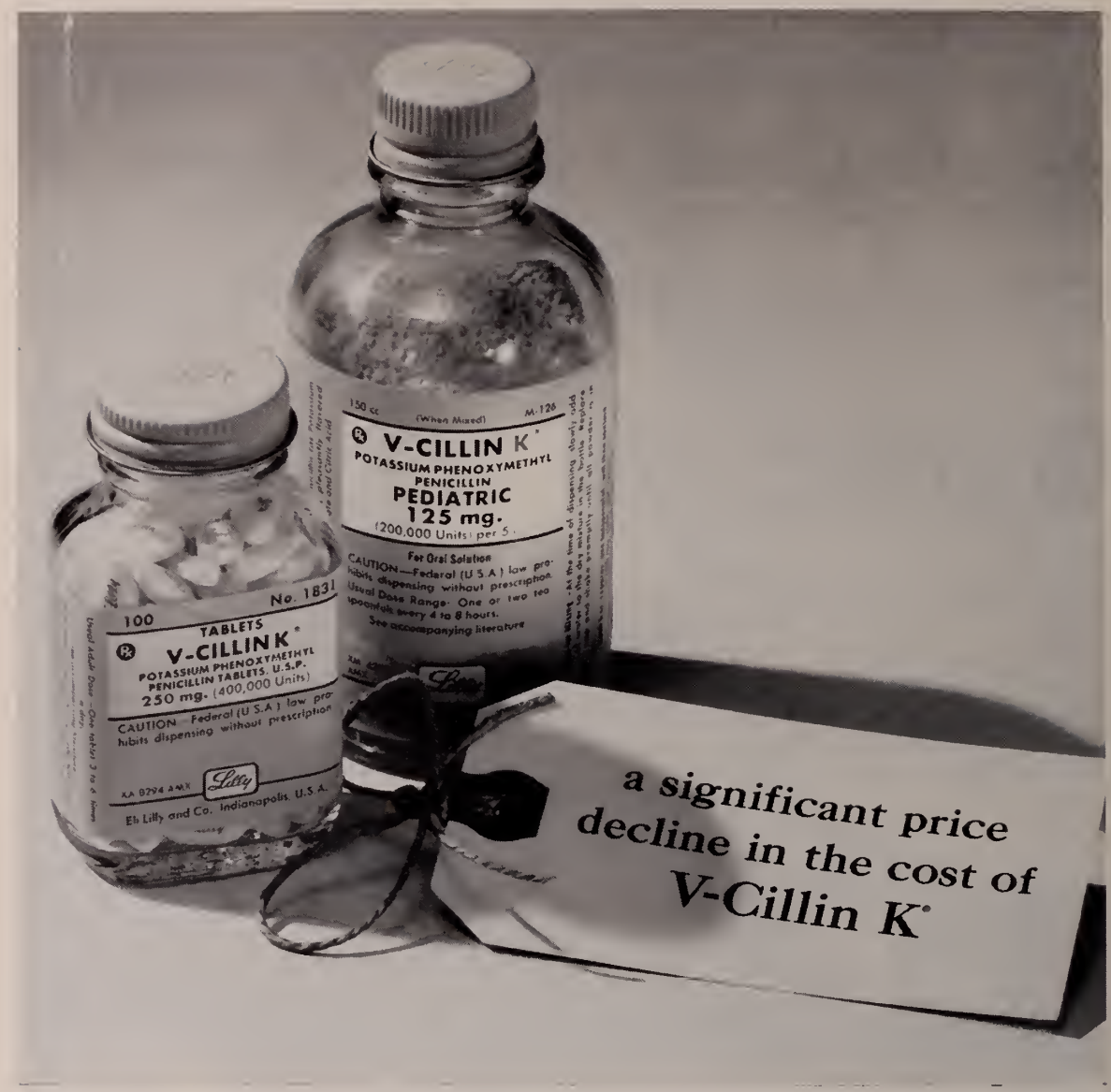

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The General Care of Cleft Lip and Palate Patients

D. Ralph Millard Jr., M.D.
MIAMI

Birth of an infant with cleft lip and/or palate comes as a tragic shock to the family and a disappointment to the obstetrician. The obstetrician may refer the infant immediately to a plastic surgeon, or he may leave this responsibility to the pediatrician. As the ratio of clefts to normal births runs about 1:750 in the United States, all busy pediatricians have a good chance of taking part in the care of the cleft lip and palate patient. If the obstetrician has not already done so, it will be the responsibility of the pediatrician to assure the parents that in no direct way by negligence or other obvious action have they as parents been responsible for their baby's anomaly.

Etiology

There is a definite hereditary factor, but it is only a part of the entire problem for parents with one or more clefts can have a normal infant and to a lesser extent normal parents with no family history of anomalies can produce a cleft child. The arrival in a family of one infant with a cleft does not indicate that subsequent babies will be deformed. Although a repetition can occur, in general the chances are against it.

Extensive study has been underway for years in search of the etiology of this deformity. Theoretically, physicians know more about the anomaly and can produce it in animals, but practically, they are no closer to the solution. Whether by fusion of parts[1] or ingrowth by mesoderm[2] the formation of the face is complete by the first trimester. Careful records should be kept of this period by the obstetrician and a history by the pediatrician must scrutinize in detail[3] the following factors:

1. Careful study of the family history for other congenital anomalies.
2. Condition of parents at the time of conception of the deformed child.
3. Details during the first trimester of pregnancy including the mother's diet and activities, exposure to radiation, involvement with bacterial or viral infections, use of drugs and experience of emotional stress.

Optimum Time for Lip Surgery

The cleft of the lip can be closed any time from the day of birth to old age. There is no need for a rush from the womb to the operating room. The best final results are being achieved when the first operation is carried out at about three months, which is after the nose and lip components have had a chance to increase in size along with the infant who should weigh 10 to 12 pounds.

Unilateral Cleft Lip

The surgeon who performs the first lip operation has the future of the patient in his hands. In unilateral or single clefts of the lip certain natural landmarks are present, such as two thirds of a cupid's bow, philtrum and dimple, which

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must be salvaged. A method conceived by the author eleven years ago[1, 6] not only preserves these structures but shifts them into normal position with a minimal discard of tissue (figs. 1 and 2). Methods previously popular disregarded these vital structures and proceeded to destroy them. Almost any primary procedure temporarily will produce an improvement over the gaping cleft and even bring appreciation from the family. This does not excuse the destruction of natural landmarks, the permanent loss of which compromises the patient's ultimate result.

Bilateral Cleft Lip

Bilateral or double clefts do not possess the same landmarks and thus require a variation in the surgical technique.[7,8] These clefts are usually closed slightly sooner (four weeks) so that the united lip muscle band can mould the projecting premaxilla. A prosthodontist may be required to assist in achieving maxillary alignment. The lip closure usually can be completed in one operation, but occasionally two procedures are indicated. Correction of the depressed nasal tip and short columella will be carried out by a separate procedure before school age (fig. 3).[7, 10]

Fig 1. — A-D. Diagrams of the rotation-advancement method. E. Complete cleft of the lip and palate with severe distortion of the alveolus and the nose. F. Correction by the rotation-advancement method. Result at five years.

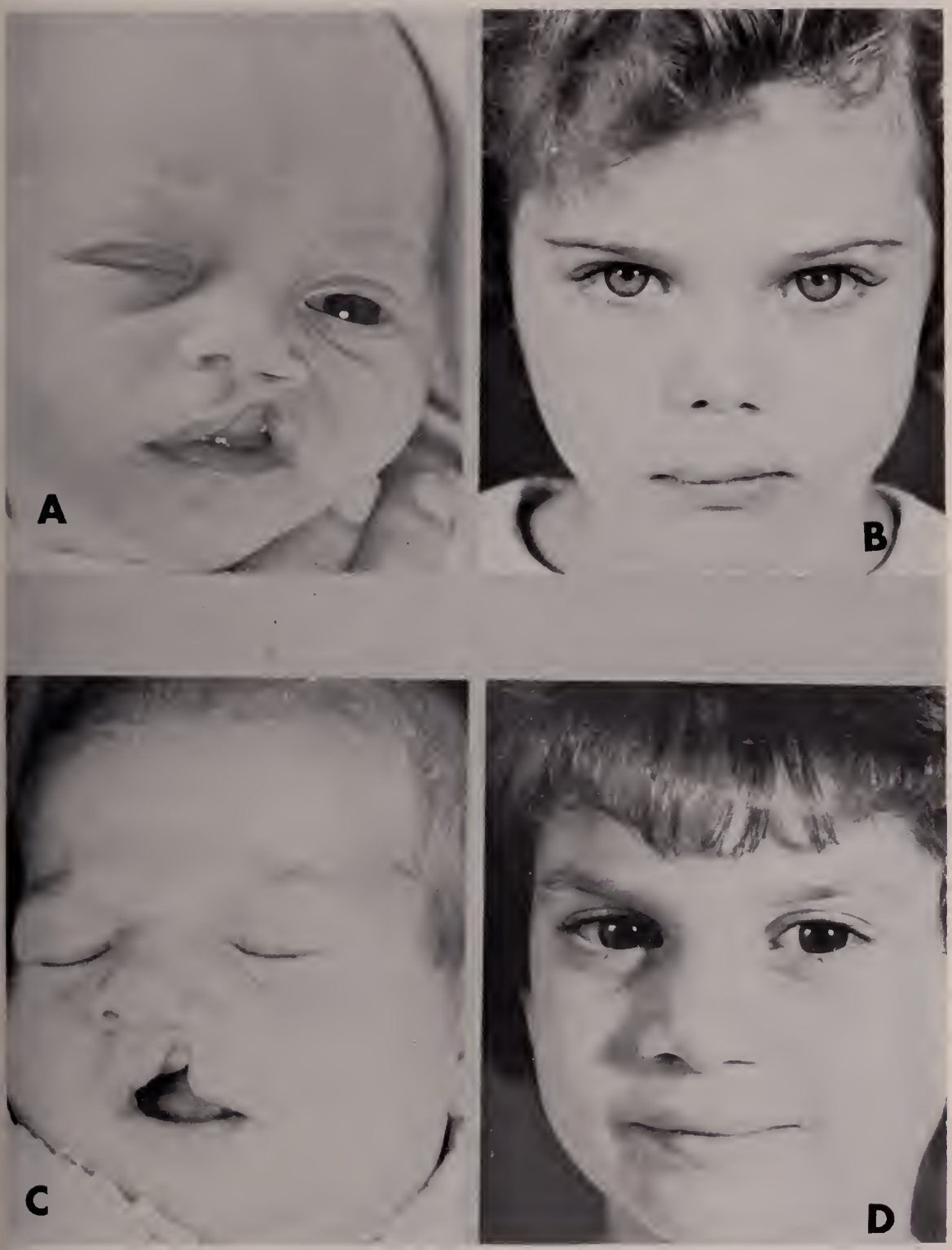

Fig. 2.—A. Incomplete cleft of lip with minor nasal distortion. B. Natural-looking lip with cupid's bow and philtrum dimple achieved along with nasal correction by author's rotation-advancement method. C. More severe lip cleft with greater nasal distortion. D. Result again by the rotation-advancement method with formation of cupid's bow and correction of the nose.

Fig. 3. — A. Incomplete bilateral cleft of the lip. B. Correction with bilateral adaptation of the rotation-advancement method. C. Complete bilateral cleft of lip and palate with protruding premaxilla. D. Lip clefts closed at two months with forked flap columella lengthening at four months. Result at five years.

Hard Palate Cleft

The second operation planned is one that deals with the alveolar defect and the anterior or hard palate cleft. This is carried out by the author at about 10 months when the premaxillary and maxillary components are in good alignment. If the alignment is unsatisfactory, earlier prosthodontic manipulation and bone grafting to the alveolar cleft will be necessary.[11] In the severe bilateral clefts with the protruding premaxilla trapped out in front of the maxillary arch the anterior palate cleft is fitted with a prosthesis and left for several years.[12,13] This procedure should not prevent closure of the soft palate at the usual one year.

Soft Palate Cleft

Surgical closure of the soft palate and lengthening when indicated are set for about 18 months of age. The technical details of relaxation and closure of the palate cleft along with pushback lengthening have been described.[14,15] The author's method of maintaining length gained with a pushback procedure by an island flap is proving of value.[16,17] Best speech results seem to follow in those palates which have been rendered functional prior to the child's attempts at speech. Then, too, the child with a cleft palate seems to have a higher incidence of hearing loss following continual episodes of upper respiratory infections. This may be associated with the abnormal pharyngeal physiology and the lack of static soft palate muscle tone to maintain patency of the eustachian tubes. Thus for speech and normal physiology early closure (12 to 18 months) of the soft palate is preferred.

Ear, Nose and Throat Consultation

Removal of the adenoids and tonsils in the child with a cleft palate is to be avoided when possible as this tissue assists in nasopharyngeal closure. Yet the decision for a tonsillectomy and adenoidectomy must be left to an ear, nose and throat specialist who will take great care to preserve all normal tissue possible.

Late Correction of Inadequate Results

Although it is true that the first operation on the lip and the first procedures used to close and lengthen the palate have the best chance of success, further surgery may be indicated. This secondary work usually is best carried out before school age. It is, however, available at any age and can be a great comfort to those who have progressed well into adulthood without realizing the possibilities of further revision (fig. 4).

Practical Preparation for Lip Surgery

The baby should be two to three months of age, healthy and gaining weight and should have a hemoglobin estimation of at least 10 Gm. The requirements can be outlined in a general rule of over 10.

Weight:	over 10 pounds
Hemoglobin:	over 10 grams
Age:	over 10 weeks

He should have been trained to sleep on his back in preparation for the postoperative period when this is mandatory to protect the healing lip from brushing the bed.[18] No special preoperative or postoperative formula is required. What was considered satisfactory by the pediatrician before closure will suffice after surgery.

Postoperative Care

Immediately following surgery certain precautions are taken to insure uninterrupted healing of the lip. Sedation is ordered for excessive crying as this will cause undesirable tension on the healing lip. Arm restraints are applied to the elbows to prevent the infant getting his fingers in his mouth and inadvertently splitting open the new wound. A slatted elbow restraint is made by sandwiching tongue blades side by side between two layers of 4 inch adhesive tape. This strait jacket is wrapped around the infant's elbow and pinned to the pajama shoulder to prevent slippage (fig. 5). A Logan bow or thin metal arch is placed across the sutured lip with inward tension on the cheeks (fig. 5). This relaxes the operative site to insure better healing and leaves the suture line open for the application three times daily of an antibiotic ointment (Neo-Cortef, Cortisporin). The ointment protects the stitch holes from the contamination of constant nasal discharge. The sutures are removed on the fourth postoperative day with the aid of sedation and the asepto syringe feeder. Antibiotic ointment application to the lip scar is discontinued the following day.

The patient is allowed to go home on the fifth postoperative day with the Logan bow and elbow restraints in place. The bow and restraints will be removed after two weeks. Prior to discharge the mother is taught how to feed her baby with a

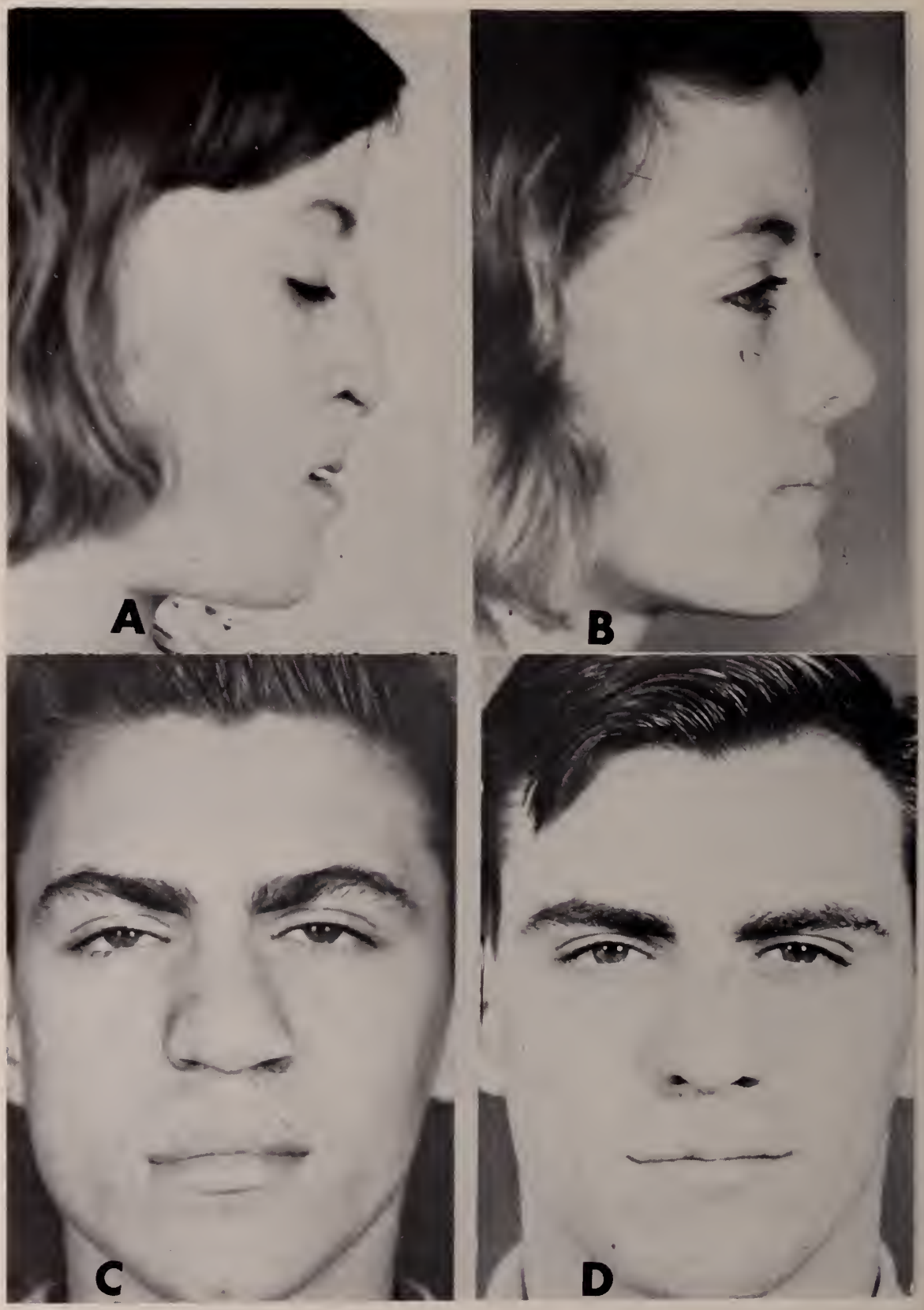

Fig. 4. — A. Typical inadequate result following bilateral cleft with flat nose, short columella, flaring alae and deformed upper lip. B. Result following forked flap from upper lip for columella lengthening, nasal tip elevation and lip correction in an 11 year old girl. C. Postoperative deformity of bilateral lip cleft with flat nasal tip. D. Secondary correction of lip and nose at age 14 years.

Fig. 5. — A patient, supported in the bolt upright sitting position, is being fed formula by a 10 cc. asepto syringe with a catheter sleeve. The Logan bow and modified arm restraints are still in position one week after surgery and will be maintained another week.

cleft lip feeder. MacCollum and Richardson[18] advocate a 10 cc. asepto syringe with a 1½ inch piece of rubber catheter slipped over the end of the nozzle. The baby must be held bolt upright and the catheter eased over the tongue on the normal side of the mouth (fig. 5). The asepto bulb is squeezed slowly in order to deliver only the amount the infant can take easily. For these feedings Oldfield and Tate[19] use a knocked-up spoon which has had its sides hammered to produce a deeper trough. Return to bottle feedings one month after surgery is allowed unless there is also a cleft of the palate. In this case the asepto technique, cup or knocked-up spoon feedings should be continued until sometime after palate closure.

It is important that the pediatrician realize and the parents be reassured that the red, firm, contracting lip scar at one month after surgery usually will be soft and pale at six months and almost invisible at one year. When a minor lip correction is necessary, it is usually carried out at six months or postponed until time for palate surgery.

Practical Preparation for Palate Surgery

Whether the surgery planned is anterior hard palate closure with or without bone grafting at six to 12 months or the second stage soft palate closure with lengthening at 12 to 18 months, the general preparation is similar. The patient should be relatively free of upper respiratory infection and possessing a hemoglobin level of at least 10 Gm. He should be prepared for the postoperative routine by feeding with a spoon, cup or the asepto syringe by various people using a good variety of liquids. Two weeks prior to palate surgery the

mother can use a white cap and gown to prepare the child for hospital nurses.[18] Because of the possible loss of blood during extensive palate procedures a blood transfusion (10 cc. per pound of body weight) is planned at the time of surgery.

Postoperative Care

Elbow restraints are applied to prevent the patient from inadvertently disrupting the healing palate. These restraints are maintained three weeks at home with short periods of controlled freedom. Because of unavoidable and continuous contamination a systemic antibiotic is used for three to five days postoperatively.

With the aid of the asepto syringe, knocked-up spoon or cup the baby is fed liquids the first two weeks following surgery. Each feeding is followed by a drink of water which serves as a mouthwash. During the next two weeks the baby receives a soupy diet. At one month a regular diet excluding hard food such as toast and rock candy is begun. No straws are allowed for a couple of months from the time of surgery.

Speech

Normal speech without therapy should follow palate closure and lengthening in the majority of cases when this is completed at 12 to 18 months. The parents must encourage and insist on good speech with regular daily exercises emphasizing consonants S, E, K, Ch, and T which require more practice.[18] Special exercises through the use of a soap bubble pipe, wind instruments and balloons can be encouraged two months after surgery. Evaluation and assistance by the speech therapist can be of value after four years.

Special Clinic

There is in South Florida a Cleft Palate Clinic which has available many valuable diagnostic aids for those caring for the cleft palate patient. Through the aid of a grant from the National Institutes of Health, cephalometry, cinefluorography, audiometric testing, speech analysis, orthodontic analysis, and psychological testing are all available without financial cost to the patient or the attending physician. The Clinic is organized solely as a diagnostic, advisory, and research center and is not involved in treating the individual patient. It is important that all pediatricians know that economic status is not a barrier to the availability of proper surgical treatment for these cleft lip and palate patients. Financial aid for those in need is available through the Florida Crippled Children's Commission and the Board of Trustees of the South Florida Cleft Palate Clinic.

References are available from the author upon request.

2121 Biscayne Boulevard.

Cardiac Auscultation in Patients With Starr-Edwards Prosthetic Valves

PHILIP SAMET, M.D.,
AND WILLIAM H. BERNSTEIN, M.D.
MIAMI BEACH

The introduction of prosthetic cardiac valves[1,2] has made effective surgical therapy possible in patients with badly deformed aortic and mitral valves. The valves may be employed in subjects with stenotic lesions, valvular insufficiency, or combinations of stenosis and insufficiency. The cardiac sounds are altered in characteristic fashion by the presence of these valves. It is necessary for the modern physician to be aware of these sounds since increasing numbers of subjects have had such valves implanted. The purpose of this report is to describe the auscultatory findings in a patient with a Starr-Edwards mitral prosthetic valve, in a patient with a Starr-Edwards aortic valve, and in a third subject with both an aortic and a mitral prosthetic valve. It is first necessary to describe briefly the cardiac sounds in normal patients and those with aortic and/or mitral valve disease.

From the Section of Cardiology, Department of Medicine, Mt. Sinai Hospital, Miami Beach and the Section of Cardiology, Department of Medicine, University of Miami School of Medicine, Coral Gables.
Supported by a grant from the National Heart Institute, H-08503-1.

In the normal adult subject, two heart sounds, the first and second, are usually the only audible sounds. The first sound is primarily caused by closure of the atrioventricular (mitral and tricuspid) valves. The second sound is caused by closure of the semilunar valves, aortic and pulmonary; the second sound may be split. Atrioventricular valve opening is inaudible. The opening of the semilunar valves may contribute to formation of the first heart sound, but is not audible as a distinct sound. The heart sounds per se have the characteristic lub-dub quality. The subject with mitral stenosis exhibits a loud first heart sound, an opening snap at the time of opening of the mitral valve, and the characteristic presystolic and diastolic rumbling murmurs. The second pulmonic sound may be accentuated. In mitral insufficiency a third heart sound may be audible in addition to the holosystolic murmur. The patient with aortic stenosis exhibits an ejection systolic murmur; the opening of the aortic valve may be audible as an early systolic ejection sound which simulates a split first sound. A similar ejection sound may be heard in the patient with aortic insufficiency, in addition to the diastolic blowing murmur.

Fig. 1. — Right lateral chest roentgenogram in the patient with a Starr-Edwards prosthetic aortic valve.

The phonocardiographic data in a patient with a Starr-Edwards aortic valve (fig. 1) are illustrated in figure 2 together with the electrocardiogram and the left ventricular and brachial artery pressure curves. A grade I systolic ejection murmur is present. The aortic ejection sound, opening snap of the aortic valve, is evident (E in fig. 2). The second sound is readily delineated. The characteristic feature on auscultation is the loud clicking quality of the aortic ejection sound and the second sound. The metallic clicking quality of these two sounds is highly suggestive of the Starr-Edwards aortic valve. When allowance is made for the delay in pulse wave transmission between the aortic valve and the brachial artery, the ejection sound may be noted to occur at the

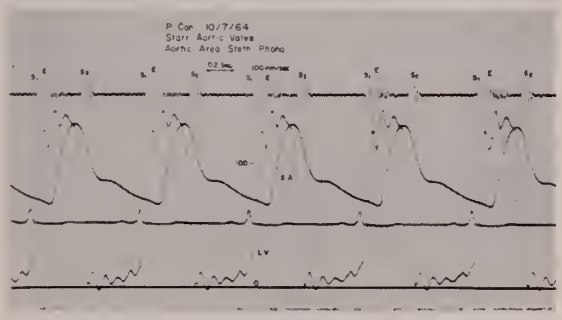

Fig. 2. — The aortic area phonocardiogram, brachial artery and left ventricular pressure pulses and the electrocardiogram are shown. The aortic opening snap and the second sound have clicking features.

onset of the upstroke of the brachial artery curve. The second sound is at the time of the dicrotic notch, again allowing for the delay in pulse wave transmission. The small mean systolic aortic gradient is evident.

The phonocardiogram in a patient with a Starr-Edwards prosthetic mitral valve (fig. 3) is illustrated in figure 4. The first heart sound has a loud metallic clicking quality. The second heart sound is normal, but is followed by a single metallic sound, the opening snap of the mitral valve. The opening of the mitral valve is normally inaudible. In mitral stenosis, the opening snap is a low-pitched dull sound. The opening snap takes on a characteristic quality after insertion of a Starr mitral valve. The second sound, however, remains normal.

The phonocardiogram in a woman with both mitral and aortic Starr-Edwards prosthetic valves (fig. 5) is shown in figure 6. Four metallic clicking sounds are heard on auscultation, the first sound, the aortic ejection click, the second sound and the mitral opening snap.

Fig. 3. — Right anterior oblique chest roentgenogram in the patient with a Starr prosthetic mitral valve.

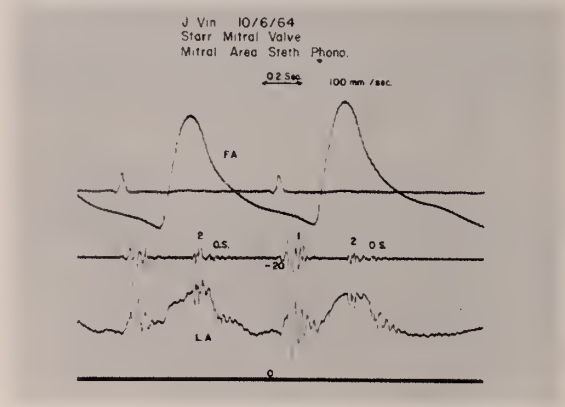

Fig. 4. — The femoral artery and left atrial curves, the electrocardiogram and the mitral area phonocardiogram are illustrated. The first heart sound and the mitral opening snap have clicking characteristics.

Fig. 5. — Left anterior oblique roentgenogram in the patient with both mitral and aortic prosthetic valves.

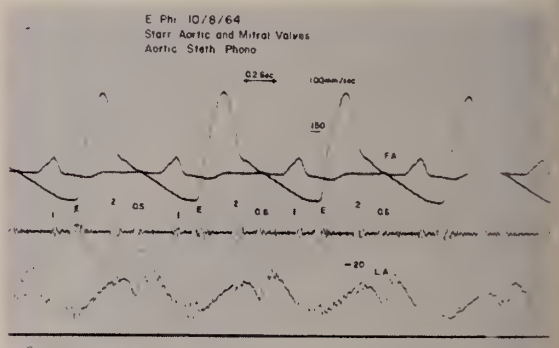

Fig. 6. — The femoral artery and left atrial curves, the electrocardiogram and the aortic area phonocardiogram are shown. The first heart sound, the aortic opening snap, the second heart sound and the mitral opening snap all exhibit clicking characteristics.

Discussion

The phonocardiograms and auscultatory data described in this paper make possible the ready separation of patients with mitral prosthetic valves, aortic prosthetic valves and those with both aortic and mitral prosthetic valves. In the mitral valve patient, the first sound and mitral opening snap sound have clicking characteristics. In the aortic valve subject, the aortic opening snap sound and the second heart sound have clicking characteristics. In the subject with both prosthetic valves, all four sounds have clicking characteristics. These facts enable the trained ear to diagnose readily the site or sites of prosthetic valve implantation.

Summary

Simple auscultatory criteria are given to enable the physician to identify the patient with a Starr-Edwards prosthetic mitral or aortic valve, or both. These criteria are readily utilized in everyday practice.

References are available upon request from the authors.

4300 Alton Road.

Early Detection of Carcinoma of the Larynx

A Review of Symptoms

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ST. PETERSBURG

Laryngeal cancer is curable if found early enough and treated adequately. The fact that the average patient treated for carcinoma of the larynx has had symptoms for over six months, even up to three or four years, means one of two things: either the patient waited that long before seeking help, or the diagnosis was not made by the physician early in the course of the disease.

With the great variety of symptom complexes presented daily to the physician, he has constantly to run through one differential diagnosis after another, and then prescribe some form of therapy. Since throat and respiratory symptoms constitute a major complaint of all ages, since the literature is scarce concerning symptoms of carcinoma of the larynx, except hoarseness, and since this diagnosis is usually made late in the course of the disease, it seemed worthwhile to gather the symptoms of laryngeal carcinoma into one article for review. Statistical incidences of symptoms have purposely been omitted, because each symptom presented may be the only one present and it is thought that the physician should be aware of all of these symptoms and their possible clinical significance (table 1).

Table 1.—Outline of Symptoms of Laryngeal Carcinoma

1. General Symptoms
   - Weight loss
   - Cachexia
   - Mass in neck
2. Ear Symptoms
   - Otalgia
3. Respiratory Symptoms
   - Cough
   - Hemoptysis
   - Wheeze
   - Shortness of breath
   - Difficulty expelling secretions
   - Laryngeal rhonchi
4. Throat Symptoms
   - Voice change
   - Hoarseness
   - Sore throat
   - Dysphagia
   - Cough when swallowing
   - Fullness or tightness in throat
   - Tickle or lump in throat
   - Pain
   - Pain on talking
   - Laryngeal rhonchi
   - Halitosis

Treatment will not be discussed except to say that any intrinsic or extrinsic lesion of the larynx, without distant metastasis, can be treated with an overall five year survival rate that has been variously reported as averaging above 50%. The survival rate of early lesions has been reported to be as high as 95%.

Early carcinoma of the larynx, if treated adequately, has one of the highest cure rates of any known internal malignant disease. The great majority of laryngeal cancers, however, come to the specialist late in their course and so lose out in this high cure rate. Even so, there still remains a fairly high rate of cure if these late cancers are treated vigorously and thoroughly.

In general, and for the sake of this discussion, early carcinoma of the larynx is considered to be that in which the lesion is confined to the intrinsic larynx and can be removed by utilizing a wide field laryngectomy. Late carcinoma is considered to be that in which, in addition to a laryngectomy, a radical neck resection needs to be performed, or one which has distant metastases. The duration of symptoms cannot be used to determine an early or a late lesion, for experience has shown that a very large or late lesion may produce few symptoms of short duration. It is the purpose of this article to point out some of the early clues to a possible malignant lesion of the larynx, and to stress the urgency of an early diagnosis.

Diagnosis

Diagnosis of laryngeal carcinoma is made by suspicion, visualization, and biopsy, in that order. The last two require very simple instruments, but the first requires a conscious, diligent, and persistent effort on the part of every practitioner in every field of medicine. The urologist, the gastroenterologist, and even the pathologist occasionally treat a simple sore throat for a patient, an employee, a friend, or a relative. So this conscious

Presented before the Hospital Staff Meeting, Good Samaritan Hospital, Lexington, Ky., July 15, 1964.

effort of maintaining suspicion escapes no one in any field. The family physician is in an ideal position to detect early laryngeal carcinoma if the patient should present with any of the symptoms discussed in this paper.

The public is becoming increasingly aware, through the work of the American Cancer Society and the "Seven Danger Signals," that hoarseness may mean cancer. It is a challenge to every practitioner to rule out a diagnosis of carcinoma of the larynx in any patient who comes to him for hoarseness, sore throat, or any of the other symptoms mentioned later. Reassurance of no cancer is wonderful therapy for a patient secretly fearful of it.

Hoarseness can be diagnosed in any language, but it takes an alert observer to elicit a history of, or observe a change in the voice, such as a slight "muffled" or "garbled" tone to the voice. The patient may or may not be aware of this gradual change in the voice. It is usually seen in lesions at or near the vocal cords which do not interfere with vocal cord movement, but rather have a damping effect on the air column as it moves toward the oropharynx. Such a lesion may be on the false vocal cords, the epiglottis, the pyriform sinus, the ventricle of the larynx, or the posterior laryngeal area.

Lesions which interfere with the approximation of the free margins of the vocal cords cause true and very early "hoarseness." These lesions may be only 1 mm. to 2 mm. in size, and are usually easily visible. Later, as the lesion becomes larger and the vocal cords become more fixed, there may be a "breathy" quality to the voice where only two or three words are spoken with each breath. This failure of vocal cord closure, due to fixation of one or both cords, may also interfere with expulsive coughing, as mentioned later, since the patient cannot build up adequate intrathoracic pressure. There may be pooling of saliva and secretions in the larynx, and there may be audible "laryngeal rhonchi" when the patient is first seen. These may be both inspiratory and/or expiratory. In addition to "Have you had hoarseness?", the question, "Has your voice changed?", should be asked in the routine history of every smoking patient.

A cough may be one of the first symptoms of a laryngeal tumor. A subglottic lesion, a lesion of the superior surface of the vocal cord, a pyriform sinus lesion, a lesion of the aryepiglottic fold, and a lesion of the posterior surface of the epiglottis are among those in which a chronic, sometimes productive cough may be the first symptom. The cough is frequently "raspy" or "brassy," and is usually associated with some type of voice change. Hemoptysis may also originate in the larynx, and may be scant or profuse, necessitating emergency procedures. There may be pain on talking, especially if the lesion involves the cricoarytenoid joint, or its capsule.

Symptoms may be associated with the size and also the location of the lesion, such as shortness of breath, wheezing, dysphagia, fullness, tightness, or tickle in the throat, or difficulty with expelling secretions. It should be remembered that any of these may be the only symptom of laryngeal cancer, and any patient with these symptoms should have the benefit of mirror laryngoscopy. Barium swallow and chest x-ray, more frequently than not, give negative results in the patient with these symptoms and a lesion of the larynx.

Some lesions may cause partial anesthesia of the larynx if they involve branches of the superior laryngeal nerve, and thus the patient may complain of coughing when eating or drinking. This is due to aspiration of swallowed particles, either because of hypesthesia of the larynx, or because of a mass, or a loss of tissue and hence failure of the laryngeal sphincters to close fully during the swallowing act. This symptom should lead one to examine immediately the larynx and its adnexa, and if the examination gives negative result, then one might proceed with ancillary studies such as barium swallow and chest x-rays.

Otalgia or ear pain is a frequent enough symptom to bear in mind. When a negative ear examination is made with a history of a rather vague, constant, deep ear pain, then one must search from the nasopharynx and sinuses through the pharynx to the extrinsic and intrinsic larynx for a possible etiology. This pain is thought to be mediated through reflex arcs connecting the pharyngeal plexus and branches of the vagus nerve and possibly the glossopharyngeal nerve which go to the ear. The majority of lesions responsible for referred otalgia are located laterally in the nasopharynx, pharynx or larynx.

An interesting observation in my cases, and perhaps seen in other cases of carcinoma, is that 100% of my cases of *late* carcinoma of the larynx have been accompanied by loss in weight. This is mentioned because, in my opinion, once loss in weight has begun, the prognosis is decreased considerably and the chance of a metastasis being

present is increased. Loss in weight will probably become the "Eighth Danger Signal" of cancer, and since the public is weight-conscious, it becomes a definite challenge for the physician to ascertain the cause of a rapid change in weight.

One of the most common chief complaints throughout the world is "sore throat." Volumes could be written to describe this complaint, its diagnosis and its treatment. It is intended here only to point out that a patient with carcinoma of the larynx may have as a presenting symptom a simple sore throat which persists and resists the usual treatments. An arbitrary "sore throat limit" of three weeks probably should be set, following which time, an indirect laryngoscopy should be carried out by a specialist, unless the use of the laryngeal mirror is routine with the private practitioner; then the laryngeal examination should, of course, be performed on the initial visit.

Halitosis is commonly present, and the experienced observer may detect a characteristic necrotic odor of late carcinoma. This may also be a symptom volunteered by members of the patient's family.

Other initial symptoms may be tenderness of the laryngeal cartilages, or a mass in the neck. If infection is present in the lesion, then the usual signs and symptoms of inflammation will be present. Any of the symptoms discussed may be present in any combination. Following a suspicion of a laryngeal lesion, inspection and biopsy should be performed immediately. Each year it is estimated that 5,000 persons will have carcinoma of the larynx, and that approximately 50% of these will undergo laryngectomy. It is interesting to speculate as to what is the fate of the remaining 50%. Fortunately, some of the early ones receive irradiation and are perhaps cured, but tragically, some of them are probably treated for globus hystericus, chronic laryngitis, ear aches, bronchitis, or tonsillitis, and some are probably treated by penicillin and reassurance without ever having had a simple laryngeal examination.

Visualization of the larynx requires a good light source, preferably 100 watts or more, a laryngeal mirror, and an inexpensive head mirror. With these relatively primitive instruments of today, practically 100% of early laryngeal lesions can be seen. There remains a very small percentage of lesions originating in the hidden areas of the larynx which cannot be viewed by the indirect technique (fig. 1). Also, there may be a small percentage of patients who, because of anatomical variations, do not yield to an easy indirect laryngoscopy. Any lesion, either suspected by history or seen in the mirror, should then be referred to a specialist for definitive therapy.

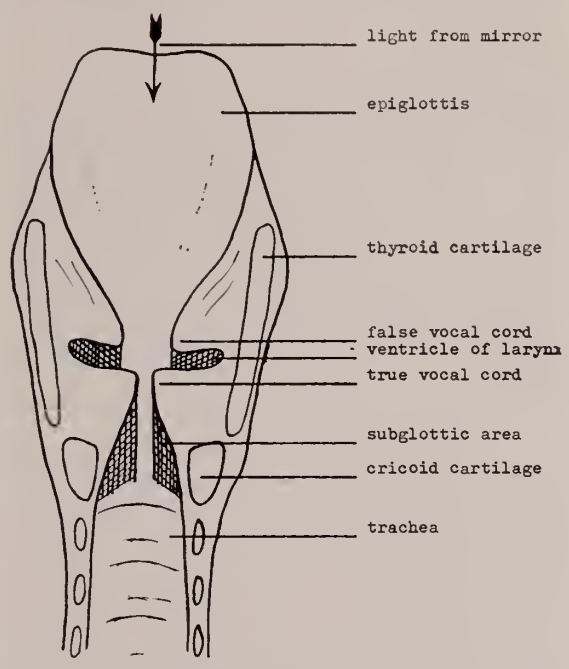

Fig. 1. — Schematic drawing showing that shaded areas are hidden from mirror laryngoscopy.

Summary

Examination of the larynx needs to become an essential part of every history and physical examination. Just as the patient with angina has his blood pressure checked, or the patient with melena has a rectal examination, so should the patient with any of the previously mentioned laryngeal symptoms have a complete laryngeal examination. Early detection of possible carcinoma of the larynx needs the awareness and combined efforts of everyone in the field of medicine.

References are available from the author upon request.

663 Sixth Avenue South.

Sporotrichosis-Easily Diagnosed, Easily Cured

Four Florida Cases

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and George A. Segal, M.D., Hialeah

The clinical presentation of cutaneous sporotrichosis is unique both in its initial appearance and in its evolution; the diagnosis should therefore be entertained promptly upon first seeing the patient. Yet diagnosis is commonly delayed from the physician's sheer inexperience with it. Four typical cases with appropriate photographs are presented. Sporotrichosis is increasing in Florida and this report is intended to facilitate its recognition.

Typically, the patient is a horticulturist whose trouble begins with an indolent pustule on the hand or on the forearm. He may recall the minor trauma of skin penetration that preceded the sore. The indolent pustule enlarges and after 10 to 20 days ruptures, becoming a chronic ulcer with a bleeding, crusted base. Within two weeks there is an ascending, pink lymphangitis with multiple subcutaneous nodules appearing along the red lymphatic. There may be three to 40 such nodules. At first the nodules are mobile within the subcutaneous tissue, but later they attach to the skin and finally they, too, ulcerate leaving open, draining, red sores from the hand up along the forearm and the arm. Axillary lymphadenopathy is rare. There is no fever and there are no systemic symptoms. Pain is uncommon once the various lesions have ruptured. The patient is simply an esthetic pariah troubled by constant weeping sores and alarmed as to possible malignancy. The sores may prevent his working. Usually the sores involve the upper extremity, but they may appear on the legs, the face, or the trunk. The site is determined by the traumatic skin puncture which always precedes.

Sporotrichosis rarely spreads beyond this cutaneous-lymphangitic phase. On spectacular occasions there has been diffuse skin involvement[1] or visceral disease. From 1912 to 1961, 20 instances of pulmonary sporotrichosis were reported.[2]

The incidence of cutaneous sporotrichosis in the United States is not known. Schencki,[3] in 1898, described the first patient, an iron worker of St. Louis, identifying the causative organism which is now known as the Sporotrichum schenckii in recognition of his contribution. From 1898 to 1951 there were 275 reported cases of which two thirds originated from the Mississippi River Basin.[4] As the characteristic features of the disease have become more generally known, enthusiasm for reporting fresh instances has waned. The extent of unreported cases is suggested by the 1952 publication of Dobes[5] presenting six personal cases from Georgia. Previously there had been but one case reported from Georgia, but on polling every dermatologist in the state he uncovered an additional 40 cases treated in the state during the 1942-1952 decade, but not reported.

Eight cases were reported in 1960 from northern Florida by Crevasse and Ellner.[6] All patients were nurserymen ("mossers") and in all the source was traced to a common shipment of sphagnum moss from Wisconsin. To date only 10 cases have been described in Florida.[7] We present four additional cases to emphasize by word and by photograph the characteristic appearance and evolution that ought to permit prompt diagnosis and treatment.

Report of Cases

Case 1.—A 57 year old, self-employed gardener, was first seen in mid-November 1963 with a weeping sore at the base of his left thumb and a dozen ulcers distributed in a line up the forearm and arm (figs. 1 and 2).

He related the thumb sore to a cactus injury on July 25. He recalled pulling out the imbedded cactus thorn. A red boil, that "blistered," ensued. He did not consult a doctor until August 10 when a slightly painful red streak appeared on the lower forearm. The thumb blister was incised and a retained thorn remnant was said to have been extracted, but its removal was never confirmed. He was given several penicillin injections.

From the Department of Surgery, St. Francis Hospital, Miami Beach, and Hialeah Hospital, Hialeah.
Financed by the Herbert Jerome Research Foundation.

Fig. 1

Fig. 2

The thumb sore continued to drain and soon lumps appeared along the red streak of the forearm. A second physician was consulted who initiated a series of drainage incisions of each of the lymphangitic lumps. Approximately a dozen weekly drainage incisions were carried out between mid-September and mid-November. A discouraged patient, able to work and feeling well, but troubled by an ugly, weeping hand and progressing lesions of the forearm, sought additional advice.

When we first saw him in mid-November, we did not suspect sporotrichosis per se as we should have. There were no systemic findings or symptoms. There was no axillary lymphadenopathy. We did suspect a fungus infection and proceeded immediately to tissue biopsy and culture of both the thumb sore and one of the larger ulcers on the arm.

Sister Austin Marie, O.S.F., hospital bacteriologist at St. Francis Hospital, diagnosed sporotrichosis when dark colonies appeared on Sabouraud's medium. Paraffin sections stained by the hematoxylin-eosin method, confirmed a granuloma with giant cells (fig. 3). Diagnosis was subsequently confirmed by the Florida State Board of Health laboratory. Saturated potassium iodide therapy was begun, at first 10 drops three times a day with progressive increments until he was receiving 40 drops three times a day, orally. Dilute Ioprep compresses were applied directly to the ulcers. By December all ulcers had epithelized, and the patient was exceedingly grateful. Therapy was continued for an additional month despite acneform rash of the face which did not progress. There were no digestive symptoms. The acne cleared when the iodide therapy was stopped. The lesions have remained healed since cessation of therapy.

Case 2.—A 35 year old nurseryman injured the dorsum of his left hand while handling sphagnum moss. He was seen two weeks later, on Sept. 30, 1961, with an apparent carbuncle which was draining. He was given tetanus toxoid booster and oral erythromycin. The carbuncle failed to respond and actually increased in size forming an ulcer with undermined margins. On October 9 a string of nodules appeared, running up the ulnar side of the forearm. They varied from 1 to 1½ cm. in diameter and all were subcutaneous. Culture of the exuded material from the hand was placed on Sabouraud's medium and after a week, Sporotrichum was identified. Potassium iodide therapy was begun on November 14, at first 10 drops four times a day, increasing to 25 drops four times a day with Iodex ointment applied directly to the skin lesions. Within 10 days there was evidence of marked healing with closure of the ulcer on the hand and diminution in the size of the subcutaneous nodules on the forearm. By Jan. 2, 1962, all ulcerations were healed and therapy was stopped. He returned to work and has been well since.

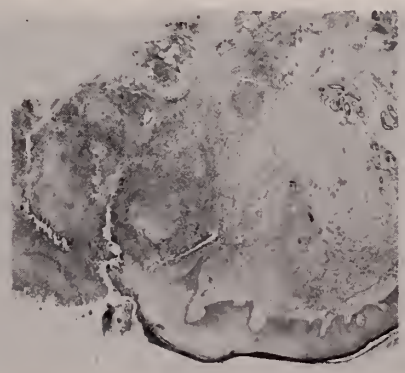

Fig. 3

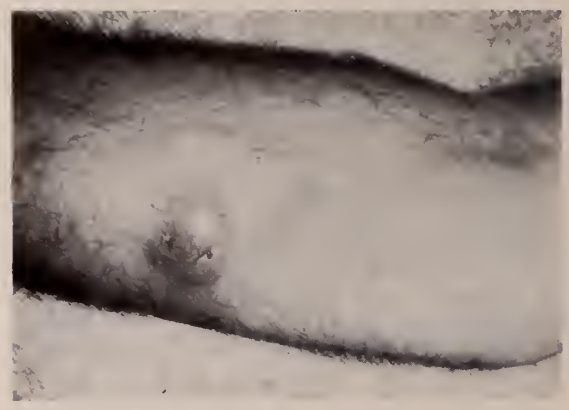

Fig. 4

Case 3.—A 38 year old nurseryman, a co-worker of the patient in case 2, punctured his right hand in the webbing between the third and fourth fingers while handling sphagnum moss. He was seen on Nov. 27, 1961, 10 days later, with a tender, red, subcutaneous nodule on the forearm (fig. 4) and several subcutaneous nodules on the dorsum of the hand. He was hospitalized. Material obtained on needle aspiration of the nodule on the forearm was cultured on Sabouraud's medium. The clinical picture, however, was so characteristic of sporotrichosis that potassium iodide therapy was started immediately without culture confirmation. At first, he was given 10 drops three times a day, progressively increased to 25 drops three times a day with Iodex ointment applications topically to the lesions. The aspirated material failed to grow any fungi, but the response to iodide therapy was dramatic with complete recession and epithelization so that the patient could be discharged by December 12. Therapy was continued on an outpatient basis until he returned to work on January 20 after eight weeks of therapy. The lesions have remained completely healed and he has had no further difficulty.

Case 4.—A 44 year old "mosser" was found dead of self-inflicted bullets to the head on Sept. 10, 1963. On August 12, while working with moss he had punctured the webbing between the thumb and forefinger of his right hand with a Japanese bamboo stick. The initial puncture injury was the diameter of a standard lead pencil. A sore appeared which became ulcerated and enlarged. He had to stop work. Erythromycin therapy was initiated, but the lesion continued to increase in size and nodules appeared on the forearm. Additional details were not available.

He was known to suffer periods of depression usually attributed to an incapacitating ununited right tibial fracture that followed an automobile accident many years before. The fracture was loosely bridged by an exposed metal plate. The relentlessly progressive sores of the right hand and forearm were thought to have increased his despondency and he was quoted as having remarked, "I'm dying of cancer."

Dr. Joseph H. Davis, Medical Examiner of Dade County, at the time of autopsy, smeared some of the purulent hand material on a slide, and through the microscope identified the typical cigar bodies of the sporotrichosis fungus. Such direct examination, however, usually is not fruitful. Culture of the material on Sabouraud's medium further confirmed the diagnosis. Though right-handed, he had been so incapacitated by the Sporotrichum infection that the left hand had been employed to self-inflict the fatal shots.

Discussion

Four cases of typical cutaneous sporotrichosis are presented to emphasize the characteristic primary skin chancre with its ascending lymphangitis and satellite nodules that permit prompt diagnosis. Once suspected, a simple smear of the ulcer material onto Sabouraud's glucose medium will yield the black colonies of Sporotrichum schenckii in four to five days, confirming the diagnosis. Direct examination of the purulent exudate is almost always fruitless as the characteristic cigar bodies are not seen. Case 4 is a unique exception in that organisms were identified in tissue pus.

Response to iodide therapy is uniformly good. Only eight patients have been reported who were refractory to iodide therapy.[8]

The provoking organism is ubiquitous, appearing on every continent, but most cases come from humid climes. The fungus can vegetate on living and dead grass, bark and thorns.[9] A dramatic report is that of 2,825 cases in a South African mine during the interval from 1941 to 1944. The mine timbers supported the growth of Sporotrichum only when the relative humidity was between 95% and 100%.[10] In the United States most patients have been from the Mississippi Valley. Eight persons in one pottery shop fell victim to the disease. In all the diagnosis was confirmed by culture. The grass employed in the boxing of the pottery was cultured, and proved to carry Sporotrichum schenckii.[11] Even the sawdust from an old sawmill in Whoo-Whoo Hollow, W. Va., was found adequate to support the growth of the fungus and cause human infection.[12] Several local epidemics have been traced to common exposure to sphagnum moss, but no attempt was made to isolate the fungus from the moss.[2,13] The common use of moss in South Florida in air-layering is the probable common denominator in the four cases we report. Though the disease occurs spontaneously in horses, dogs and cats, only two instances are recorded of its transmission to man from an animal, one from a horse and one from a cat.[4]

The disease so commonly affects the florist, the nurseryman and especially the so-called "mosser" horticulturist that in many states it is recognized as an occupational disease and there is no difficulty in obtaining Workmen's Compensation benefits.[3,4]

Summary

Cutaneous sporotrichosis occurs worldwide, usually among horticulturists working in a humid atmosphere. It presents with a primary sore, usually on the hand, that ulcerates and is followed

*Courtesy of Dr. Joseph H. Davis, Medical Examiner, Dade County.

by an ascending lymphangitis with subcutaneous nodules along the red streak. These nodules proceed to surface and to ulcerate. Despite the weeping sores, the patient has little or no pain and no systemic symptoms. Such a characteristic presentation should immediately suggest the diagnosis. Simple culture of the ulcer discharge will confirm the diagnosis though direct smear usually gives negative results. Treatment with oral iodide is simple and effective. Four cases are presented in word and in photograph to elucidate these aspects. All four patients were working with moss at the time of a traumatic skin penetration that preceded the primary "sore."

References are available from the authors upon request.

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Pulmonary Histiocytosis X Clearing on Steroid Therapy

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Histiocytosis X (eosinophilic granuloma) was first described by Hand[1] in 1893 in a case showing osseous defects, exophthalmos, and diabetes and was thought to be caused by tuberculosis. Schuller[2] and Christian[3] some 20 years later reported similar cases, and the disease was then thought to be a lipoid storage disease due to the abundance of this material. Letterer[4] in 1924 described a nonlipoid histiocytosis. It was not until 1941 that Farber[5] postulated that these were variations of the same disease process. Today it is apparent that the lipid when present is a result of tissue reaction. The etiology of this disease remains obscure. Neoplastic, allergic and inflammatory origins are suggested.

Histiocytosis X was reported by Farinacci, Jeffrey and Lackey[6] in 1951 to involve the lung as well as bone and skin as previously reported. Crisler, Durant and Parker[7] in 1961 reported 37 cases in which pulmonary involvement was the prime manifestation. It is a disease of young or middle-aged males, rarely seen in women. X-ray manifestations in the lung are usually reported as a nodular infiltration or diffuse interstitial fibrosis. A honeycomb pattern has been reported. The diagnosis is made only by pulmonary biopsy and the majority of cases progress to death. The following is an unusual case in that complete clearing resulted following steroid therapy. Less than a dozen such cases have been reported to date.

Report of Case

A 58 year old retired contractor who enjoyed excellent health except for hypertension was found to have diffuse interstitial fibrosis with small areas of nodulation throughout both lungs on routine chest x-ray (fig. 1). The patient had been treated with 50 mg. of hydralazine four times a day for two years for the hypertension. He denied cough, shortness of breath or any pulmonary symptoms. He was a nonsmoker who had no past history of lung disease. The family history revealed only a diabetic sister. The past history reflected his good general health, as he had never been hospitalized previously. At the time of admission, the review of systems was completely negative. No weakness or loss in weight was present. On physical examination, the temperature was 98.2 F., pulse rate 88, blood pressure 172/90 mm. Hg, weight 169½ pounds and respiration rate 20. The eyes showed increased light reflex and crossing changes from the hypertension. The lungs were clear to auscultation and percussion with no other positive pulmonary findings. Heart sounds were normal. The remainder of the physical examination was within normal limits.

Laboratory Examinations.—The hemoglobin estimation was 14.5 Gm.; red blood cells 5,140,000; white blood cells 10,500 with 73.5% polymorphonuclear leukocytes, 16.5% lymphocytes, 9.5% monocytes and 0.5% eosinophils. The sedimentation rate was 36 mm. in one hour (Westergren). The urine and an electrocardiogram were normal. The serum cholesterol was 128 mg.%. The sputum was negative for malignant cells, acid-fast bacilli and fungi. The first strength tuberculin skin test was positive and the histoplasmin skin test was negative. No pulmonary function studies were performed. Scalene node biopsy showed inflammation only.

Clinical Course.—The patient was referred to the Mayo Clinic for diagnostic thoracotomy and a lung biopsy as malignant disease was suspected. The pathology report of the lung tissue showed proliferation of histiocytes consistent with eosinophilic granuloma (fig. 2). The patient was then returned to Florida for further therapy.

In 1959 Prouty[8] reported remission in a case of eosinophilic granuloma on steroid therapy. For this reason, it was decided to employ a course of steroids in this case. Triamcinolone was used four times daily as follows: 8 mg. for two weeks, 7 mg. for one week, 6 mg. for one week, 5 mg. for one week and 4 mg. for one week, and was then reduced weekly by 0.5 mg. The course of therapy lasted just over three months. After the first month, marked clearing of the nodulation was noted and the previously enlarged right hilar nodes appeared normal. At this time, the patient showed the moon face, erythema and hypertension of the cortisone therapy.

Fig. 1. — Chest x-ray, posteroanterior view, shows diffuse interstitial fibrosis with small areas of nodulation consistent with histiocytosis x.

Fig. 3. — Chest x-ray, posteroanterior view, three months after therapy shows complete clearing of the areas of nodulation and fibrosis.

He was then started on reserpine and a diuretic for blood pressure control. The hydralazine had been stopped. By the completion of therapy, the chest x-ray was within normal limits (fig. 3). A skeletal survey made at this time showed only osteoarthritis. It has now been five years since the course of steroid therapy, and the patient remains well with no sign of recurrent disease. Yearly chest x-rays have been normal.

Discussion

It is interesting to speculate on the etiology of the nodular infiltrate of histiocytosis X in this patient. It could represent an allergic response to the hydralazine used to control hypertension for two years prior to the development of lung changes. A lupus response with positive LE cell preparations has been well verified, following the use of this drug.[9] The excellent response to steroid therapy would lend some credence to this hypothesis, though many cases have shown no response to steroids. It would be of interest to see if resumption of this drug would cause a recurrence of the nodular infiltrate. X-ray therapy and nitrogen mustard have also been used in treatment of this disease.[10] This case lacks the progressive neoplastic element found in some cases of histiocytosis X, and the inflammatory element of previous infection is not supported by the history. Of course, autosensitivity such as that suspected in collagen diseases must be considered. On reflection, it is clear that little is known regarding the etiology or pathological course of this most interesting disease.

Fig. 2. — Lung tissue shows nodular proliferation of histiocytes.

Summary

A case of histiocytosis X involving only the lung is presented. Complete clearing for a five year period following a three month course of steroid therapy was observed. Speculation as to the etiology of histiocytosis X is considered.

References are available from the author upon request.

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Evaluation of the Rapid Dextrostix Method for Determination of Blood Glucose

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and Joseph C. Shipp, M.D.**
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Dextrostix† was introduced early in 1964 as a rapid method for estimating blood glucose concentration. Specific for glucose, this test consists of paper strips impregnated with glucose oxidase and a chromogen indicator system under a semi-permeable membrane. A drop of capillary or venous blood is spread over the test end of the strip and washed off with water after 60 seconds. Glucose concentration is estimated by comparing the color development on the strip with a chart consisting of seven color blocks (ranging from shades of gray to blue) representing concentrations from 40 to 250 mg. per 100 ml.

Several investigators [1-6] have suggested a use for Dextrostix in day-to-day management of diabetic patients, in the differential diagnosis of coma, and as a screening method for the detection of diabetes mellitus.

This paper describes additional experience with Dextrostix. Its value and limitations in clinical practice are discussed.

Methods

The greater portion of this study was done over a two week period at Camp Immokalee, Florida's Summer Camp for Diabetic Boys and Girls. Venous blood was collected in heparinized tubes. The concentration of glucose in 250 blood samples was determined by the method of Dubowski[7] and by Dextrostix. All Dextrostix determinations were made by one observer within 30 minutes of the time of the chemical determination. All tests were performed within two hours after venipuncture.

Additional comparisons were made on blood specimens from 11 patients at the University of Florida Teaching Hospital. Each heparinized venous specimen was divided into three aliquots which were randomized so that the investigator had no knowledge as to their identity. Glucose concentration in each of the 33 aliquots was determined with Dextrostix by two observers, and with an Auto Analyzer. The concentration of glucose by Dextrostix was recorded before the results of the chemical method were known.

Results

Initially, in the first 200 determinations with Dextrostix, there was a tendency to underestimate blood glucose concentrations by up to 50% (fig. 1). As experience was gained, and possibly bias introduced, better agreement with the chemical method resulted and overestimations occurred. Only half of the initial Dextrostix determinations were within ± 30 per cent of the chemically determined values. Later in the study 90 per cent of the readings were within this range and 95 per cent differed from the Auto Analyzer results by less than ± 40 mg. per 100 ml. (figs. 2 and 3).

Chemically determined glucose concentrations of 250 mg. per 100 ml. or greater were indicated in only two thirds of the specimens by Dextrostix, the latter giving readings as low as 150 mg. per 100 ml. A Dextrostix reading of 250 mg. per 100 ml., however, was always confirmed by a true glucose value of this magnitude, or greater.

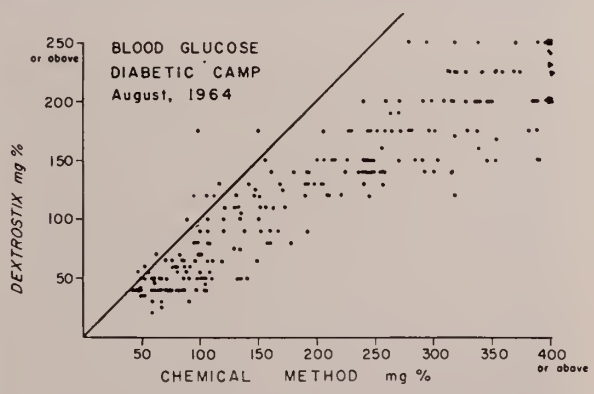

Fig. 1. — Comparison of concentration of glucose determined chemically and by Dextrostix on 250 blood samples over the two week camp period.

From the Department of Medicine, University of Florida College of Medicine, Gainesville, Fla., and Camp Immokalee, Florida's Camp for Diabetic Boys and Girls.
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*Trainee, U. S. Public Health Service, Diabetic Training Grant (AM 5444).
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†Ames Company, Inc.

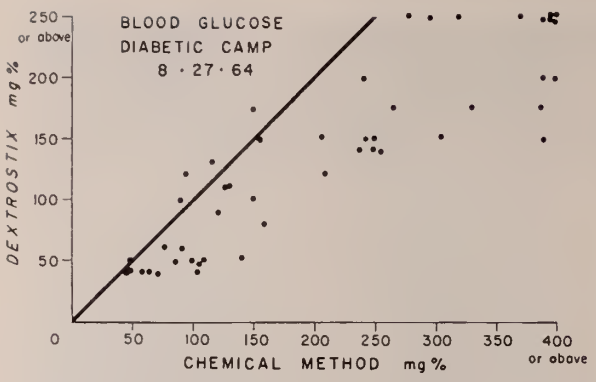

Fig. 2. — Comparison of concentration of blood glucose determined chemically and by Dextrostix. Results shown were determined on one day at the end of the two week camp period after considerable practice with the Dextrostix method. Coefficient of correlation was 0.82.

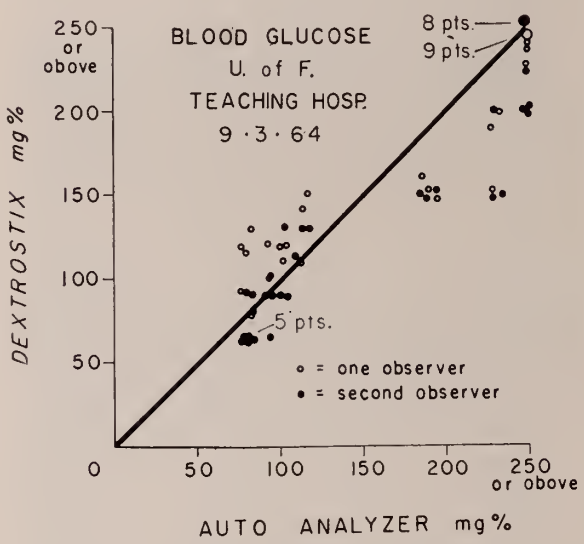

Fig. 3. — Comparison of concentration of blood glucose determined chemically and by Dextrostix. See text and table 1 for description of reproducibility of Dextrostix method. Coefficient of correlation for observers number one and two was 0.79 and 0.87, respectively.

Low blood glucose concentrations (40 to 65 mg. per 100 ml.) were usually reflected by Dextrostix. A low reading by Dextrostix, however, was 40 to 50 mg. per 100 ml. below the reference concentration in seven out of 10 instances (fig. 2).

Table 1 shows the reproducibility with Dextrostix. Disregarding inaccuracies in approximating the Auto Analyzer results, the estimation of glucose concentration by Dextrostix on each of the three aliquots agreed within ± 25 mg. per 100 ml. in seven out of 11 patients by observer number one. Similar agreement was found in nine out of 11 patients by observer two. Estimates of the two observers agreed within 25 mg. per 100 ml. 22 out of 33 times.

Discussion

The manufacturer of Dextrostix reported that in one group of 355 determinations 95 per cent of all Dextrostix readings were within ± 30% (12 to 75 mg. per 100 ml.) of the glucose concentration determined by the Auto Analyzer.[8] Although results early in the present study did not reach this degree of accuracy, similar results were obtained with further experience. Difficulty was encountered in matching the strip color to the color chart, and especially in distinguishing small increments of color intensity at higher glucose concentrations. This suggests that practice in using the strips, and experience in checking readings against laboratory-determined glucose concentrations, are necessary for their accurate use.

Table 1.—Reproducibility of Blood Glucose Concentration Determined by Dextrostix and by Auto Analyzer

Patient Number	Aliquot	Blood Glucose, mg./100 ml. Auto Analyzer	Dextrostix Observer 1	Dextrostix Observer 2
1	A	77	120	65
	B	78	90	65
	C	81	80	90
2	A	103	110	130
	B	100	120	90
	C	104	120	90
3	A	190	150	150
	B	195	150	150
	C	187	160	150
4	A	>250	250	250
	B	>250	250	250
	C	>250	250	225
5	A	>250	250	250
	B	>250	250	250
	C	>250	250	250
6	A	93	100	65
	B	94	100	90
	C	93	120	90
7	A	114	140	130
	B	110	110	110
	C	117	150	130
8	A	>250	250	250
	B	>250	250	250
	C	>250	250	250
9	A	233	200	150
	B	229	150	150
	C	230	190	200
10	A	>250	240	200
	B	>250	240	200
	C	>250	225	200
11	A	82	80	65
	B	80	120	65
	C	84	130	90

Heparinized venous blood was divided into three aliquots which were randomized. Glucose concentration was determined independently by each observer. No attempt was made to determine glucose concentrations over 250 mg./100 ml. (Auto Analyzer), since the Dextrostix method does not discriminate higher concentrations.

The tendency of Dextrostix to overestimate intermediate concentrations (80 to 130 mg. per 100 ml.) of blood glucose and to underestimate the higher concentrations was in agreement with the findings of other investigators.[1,2,6,9]

These results show that Dextrostix is reliable for indicating gross hyperglycemia, and for distinguishing hyperglycemia from hypoglycemia. To the physician caring for a diabetic patient Dextrostix may be useful in identifying the grossly uncontrolled diabetic and in the differentiation of diabetic ketoacidosis from hypoglycemic coma. To the medical technologist Dextrostix may be valuable in identifying those blood samples which require dilution before the determination of glucose concentration by chemical methods.

The results of the present study indicate the use of Dextrostix for detecting mild degrees of glucose intolerance is limited, in contrast to the contention of others.[1-6] To differentiate accurately the diabetic with modest hyperglycemia from the nondiabetic, more precise methods to determine blood glucose concentrations are required.

Summary

Experience with Dextrostix, an enzyme strip method for rapidly estimating blood glucose concentration, is described. There was a tendency to overestimate intermediate glucose concentrations and to underestimate high concentrations. Practice in using the strips resulted in improved accuracy. Results suggested that the method was of value for indicating gross hyperglycemia and for identifying hypoglycemia. Its value as a screening test for diabetes mellitus in those with minimal hyperglycemia is limited.

References

1. Cohen, S. L., and Legg, S.: A Bedside Method of Blood-Glucose Estimation, Lancet 2:883-884 (Oct. 24) 1964.
2. Rennie, I. D. B.; Keen, H., and Southon, A.: A Rapid Enzyme-Strip Method for Estimating Blood-Sugar, Lancet 2:884-886 (Oct. 24) 1964.
3. Oppenheimer, H. E.: A Comparison of Dextrostix Reagent Strips with True Blood Glucose Determinations (abstract), Clin. Res. 12:355 (Oct.) 1964.
4. Hall, J. H.; Applegate, G; Dugan, W., and Dziabis, M.: An Immediate Direct Reading Blood Glucose Test (abstract), Excerpta Medica (74):108 (July) 1964.
5. Sanders, S.: Enzyme-Strip Estimation of Blood-Glucose, Lancet 2:1183 (Nov. 28) 1964.
6. Knox, J. D. E.: Enzyme-Strip Estimation of Blood-Glucose, Lancet 2:1014 (Nov. 7) 1964.
7. Dubowski, K. M.: An O-Toluidine Method for Body-Fluid Glucose Determination, Clin. Chem. 8:215-235 (May-June) 1962.
8. Ames Company Brochure 9020 A R 674: Dextrostix: Comparative Studies of Blood Glucose Quantitation, 1964.
9. Wilson, I. V.: Enzyme-Strip Method for Estimating Blood-Sugar, Lancet 2:1062 (Nov. 14) 1964.

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Skin Antisepsis Five Year Evaluation

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HARRY S. GOLDSTEIN, M.D.,**MIAMI,
AND V. R. SAURINO, Ph.D.,*** BOCA RATON

In 1962 we reported[1] our experience with a new skin antiseptic, a balanced blend of a nonionic detergent, poly (10)-oxyethylene nonylphenol, combined with a chelating agent, tetrasodium salt of ethylenediaminal tetra acetic acid, and a quaternary ammonia, benzethonium chloride USP (Agent I).† In that study we compared this agent with sodium octylphenoxy-ethoxyethylether sulfonate, lanolin cholesterol, and petrolatum (Agent II)†† followed by benzalkonium chloride, USP‡ Both agents were effective in reducing bacterial skin counts. The infection rates in the two series were roughly equal. There was some indication that Agent I had a longer residual action as noted by lower counts on culturing the wound edge 24 hours postoperatively.[1] There is some theoretical value to effective residual action in a skin antiseptic since, as shown by Browne,[2] the organisms from infected wounds usually do not correspond to those found on skin cultures done preoperatively and, therefore, probably represent contamination introduced during surgery. In vitro studies by Saurino[3] have shown the test agent (Agent I) to be more effective in killing gram-negative organisms than the commercially available agent (Agent II). As seen from table 1, Agent I was superior to Agent II and frequently superior to

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†Carlendicide produced by the Carlen Corporation.
††pHisohex produced by Winthrop Laboratories.
‡Zephiran chloride produced by Winthrop Laboratories.

Table 1

Organisms Tested	Chemical Compounds	Killing Time at Various Dilutions 100%	1:5	1:10	1:100
Micrococcus pyogenes var. aureus (F.D.A. strain)	Agent I	15 sec.	3 min.	3 min.	9 min.
	Agent II	30 + min.	9 min.	15 min.	30 min.
	Phenol	1:70 6 min.	1:80 15 min.	1:90 30 min.	
Micrococcus pyogenes var. aureus (skin abscess)	Agent I	15 sec.	3 min.	6 min.	30 + min.
	Agent II	30 + min.	30 min.	30 min.	30 min.
	Phenol	1:70 6 min.	1:80 9 min.	1:90 30 min.	
Pseudomonas aeruginosa (human ear infection)	Agent I	15 sec.	15 sec.	3 min.	15 min.
	Agent II	Positive in all tests for 30 minutes			
	Phenol	1:50 9 min.	1:70 30 min.	1:90 30 + min.	

Table 2

Organisms Tested	Chemical Compounds	Killing Time at Various Dilutions 100%	1:5	1:10	1:100	
Bacillus subtilis	Agent I	15 sec.	15 sec.	15 sec.	6 hrs.	
	Phenol	1:60 9 min.	1:80 30 min.	1:90 30 + min.		
	Agent I	1 min.	9 min.	Pos. for 30 min.		
Aerobacter aerogenes (stock strain)	Phenol	1:20 5 min.	1:30 15 min.	1:50 30 min.	1:70 1 hr.	1:100 5 hr.
Streptococcus pyogenes beta hemolytic	Agent I	15 sec.	15 sec.	15 sec.	9 min.	
Bacillus anthracis	Agent I	1 min.	9 min.	30 min.	Pos. 1 hr.	
Escherichia coli	Agent I	1 min.	9 min.	Pos. 30 min.		
Clostridum tetani	Agent I	1 min.	6 min.	15 min.	Pos. 30 min.	

Table 3

Stuart—AOAC—Use Dilution Test

Formulation	Test Organisms	Per cent Positive at Different Exposure Periods 1 min.	2 min.	4 min.	6 min.	8 min.	10 min.	12 min.
Agent I	Staph # 209	10%	0	0	0	0	0	0
	Staph # 209	0	0	0	0	0	0	0
	S. choleraesuis	20%	0	0	0	0	0	0
	S. choleraesuis	0	0	0	0	0	0	0

Modified Reddish Test

Formulation	Test Organisms	Postive + or Negative — Results After Designated Periods of Exposure 1 min.	2 min.	4 min.	6 min.	8 min.	10 min.	12 min.	15 min.	30 min.
Agent I	Stap # 209	+	—	—	—	—	—	—	—	—
	Stap # 209	—	—	—	—	—	—	—	—	—
	S. choleraesuis	+	+	—	—	—	—	—	—	—
	S. choleraesuis	—	—	—	—	—	—	—	--	—

phenol against all organisms tested. It is especially better against gram-negative organisms. Table 2 further defines in vitro effectiveness of Agent I and demonstrates the range of effectiveness. The Stuart[4] and Reddish[5] tests clearly present the need for practical methods of evaluation of disinfectants. The need for standardization and establishment of requirements for microbial killing agents is set forth. The minimum quick-kill time capability of surface-acting agents is organized under strict conditions of temperature and moisture.[6] Table 3 indicates the rapid-kill capacity of Agent I. The test procedure demands a kill-time of 10 minutes. These requirements are met within two minutes under each of the standardizing techniques. No information on Agent II is available.

This present study is a further experience with Agent I compared with Agent II minus benzalkonium chloride which may be antagonistic to the octylphenoxy-ethoxyethylether. Figure 1 shows the increasing surgical load as well as the falling number of infections during these years of the study in this hospital. Both the number and the complexity of procedures have increased.

From March 1961 to March 1962 (fig. 2) all preparations in the operating room were with Agent I and the infection rate was 5.8%. The following year Agent I was used one month and Agent II the next month. The over-all rate was 3.2%. In the past 10 months Agent I was again compared with Agent II on an alternate month basis and infections were 0.82%. Figure 3 breaks down the two periods according to Agent I versus Agent II and shows no difference between the efficacy of the two agents. In 1962-63, Agent I was slightly superior while in 1963-64 Agent II held a small advantage.

The seven-fold decrease in infection rate over this three year period is gratifying and may result from several factors. Hopefully, the most important is an intense interest in good surgical technique and careful and diligent scrubbing with the agents used in preparation.

In our hospital most of our patients come as referrals from medicine to surgery. Hare,[7] of St. Thomas Hospital, London, found that medical patients going to surgery had a wound infection rate three to four times greater than patients admitted

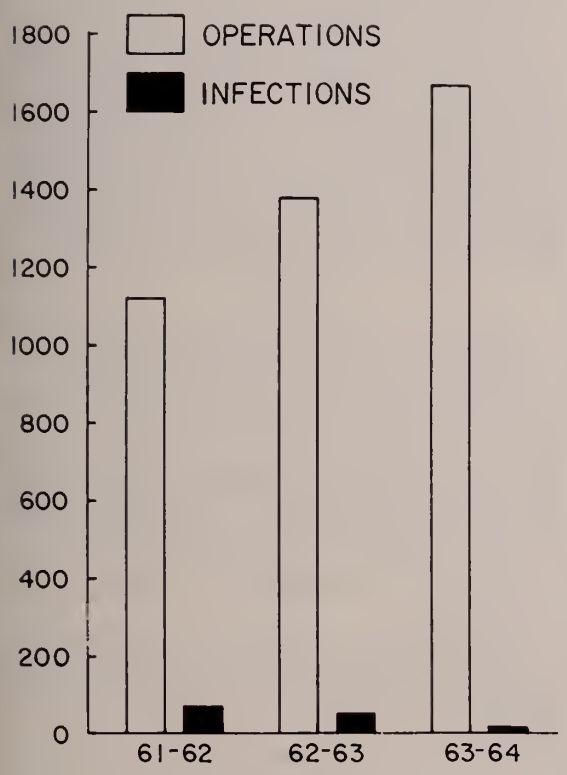

Fig. 1

Number of operations and incidence of infection.

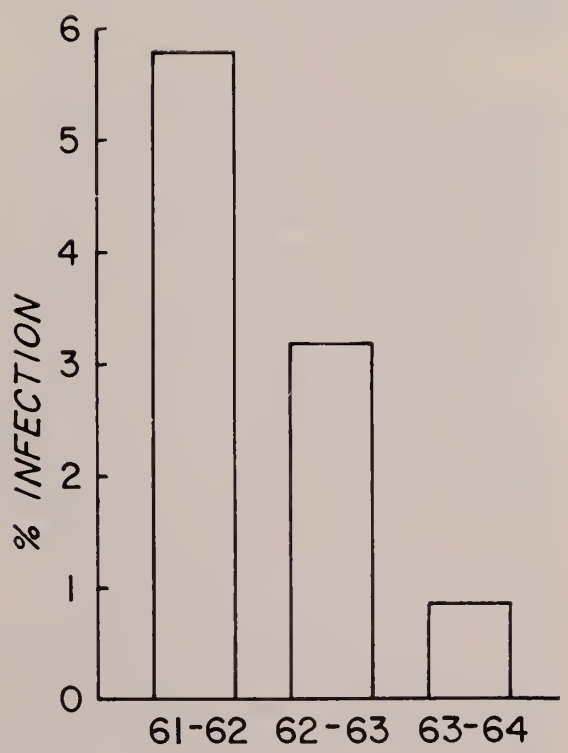

Fig. 2

Yearly infection rates.

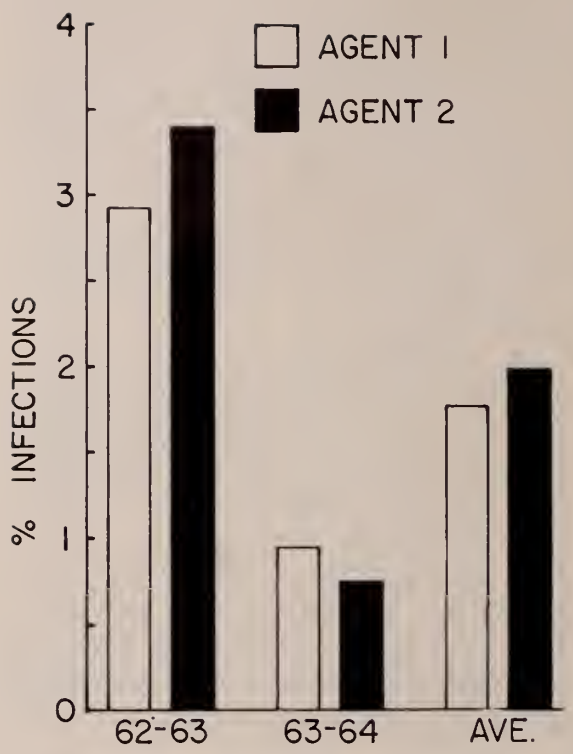

Fig. 3

Infection rate in cases prepared with Agent 1 as compared with Agent 2.

directly from their homes to surgery. This finding could mean patients hospitalized two to three weeks on medicine prior to surgery acquire hospital staphlococcus. During the period of study there was an increase rate of turnover of patients amounting to about 10% per year and with a fall in time spent on medical floors. The complexity of the surgery has not diminished and, in fact, has increased slightly during the past three years. The severity and duration of surgical procedures must be taken into consideration. This factor has been well documented by Caswell, Shrech and Burnett.[8] The fall in infection rate may represent the observed variation from year to year in the incidence of wound infections as observed by Barnes,[9] who reported infection over a 20 year span. Few studies of the epidemiology of staphylococcal wound infections or of the incidence of carrier states had been made before 1958. The drop cannot be attributed to the superiority of one agent over the other as the two groups are comparable in types of surgery and infection rate.

Meleny[10] showed that staphylococcus was the most common wound pathogen in the pre-antibiotic age and so this is not a new problem. It is important to take the seasonal and yearly variation of infection rate into account.

Casten, Nach and Apinzia[11] reported a dramatic drop of infection rate from 3.5 to 0.6 and thought it due to irrigation of wounds with penicillin solution rather than saline. Our results are equally as dramatic and we used no wound irrigations.

One of the best recent studies is that of Johnstone, Cockcroft and Johnson,[12] who utilized techniques similar to those used in our original study.[1] They, too, failed to demonstrate any significant difference between three agents widely used in preparation. It would appear that any good antiseptic is equally effective and that probably mechanical cleansing is most important.[13]

Discussion

There have been no known allergic reactions to this new Agent I and it has now been used in over 6,000 surgical procedures over the past six years. In addition, we have found this agent to be helpful in interrupting auto infections in patients with multiple staphylococcal furuncles and hair follicle infections.

Its efficacy as an agent for preparation is equal to that of one of the most commonly used agents. The quantity necessary is roughly one half. It is effective in vitro against gram-negative organisms whereas Agent II was not. It is possible any good soap would produce an equally satisfactory result and such a study should be undertaken.

Summary

Agent I is a highly satisfactory material for preparation of the skin in the operating room. It is equal to Agent II, a standard material for this purpose.

In vitro studies show Agent I to have a broad range of effectiveness and to be superior to Agent II.

No allergic reactions have been noted in over 6,000 cases.

Care in assessing efficacy of any disinfectant is stressed and some of the vagaries are mentioned.

References are available from the authors upon request.

Veterans Administration Central Office,
Washington, D. C. (Dr. Wolcott).

Emergency Medical Identification

Almost two years ago American physicians, through the American Medical Association, announced a new universal symbol which tells anyone rendering emergency care to a person who is unconscious or otherwise unable to communicate that its wearer has a special physical condition requiring special attention. In the intervening two years the symbol has gained worldwide acceptance. It has been widely disseminated throughout the United States and, through the World Medical Association, is now being utilized in many other nations.

The symbol may be displayed on a wristlet, an anklet, a medallion around the neck or elsewhere. It is a sign that there are vital medical facts on a personal health information card in the bearer's purse or wallet or on an alerting device. It is a hexagon-shaped emblem containing a six-pointed figure, or sign of life. Superimposed on the figure is a staff with a snake entwined about it—the staff of Aesculapius, the insignia of the medical profession.

The emblem is used by many persons. Diabetic coma, for instance, sometimes makes its victims appear intoxicated, and treatment may be dangerously delayed. The symbol also is used to indicate allergy to antibiotics, such as penicillin. The need for certain medicines must be known. Heart patients taking drugs to prevent blood clots may bleed profusely if injured unless they receive special care. Epileptics could be saved much trouble and unnecessary hospitalization if they carried a card indicating they may have seizures.

The American Medical Association recommends that everybody have a card, such as the AMA emergency medical identification card, to show who they are, where they live, whom to call if they become ill or injured, the name of their doctor, and when they were immunized, particularly against tetanus, or lockjaw. On this card should be noted any special problems that need immediate attention in an emergency or could cause an emergency. Some people's problems are so serious that it is absolutely essential for the first aider to know about them in an emergency. A durable signal device made of metal or plastic should be worn by such people, preferably about the neck or on the wrist or ankle.

Many organizations and manufacturers sell durable signal devices for emergency medical identification. The names of those reported to the AMA may be obtained by writing to Emergency Identification-AMA, American Medical Association, 535 N. Dearborn St., Chicago, Ill., 60610. The AMA emergency identification card also is available from the same address.

President's Page

Responsibility for Medical Care

I swear by Apollo, the physician, that I will follow
that regimen which according to my ability and judgment
I consider for the benefit of my patients and abstain
from whatever I consider deleterious and mischievous. . . .
Hippocrates, Circa 500 B.C.

These ancient wise words are appropriate to counsel our action today just as they have guided the course of medicine for over two thousand years. But freedom to choose medical regimen can be enjoyed only by those who successfully assume responsibility for medical care. Can physicians retain medical responsibility under the new federal law?

Fortunately, the final law agreed upon in conference deleted physicians' payment from the social security tax-supported portion of the law which pays for hospital services of room, board, nursing care and technicians when prescribed by a physician for any citizen 65 years of age or older.

An entirely separate method of compensation for physicians' services to the aged is available through the Voluntary Supplemental Insurance plan which will pay for medical care wherever rendered: in the home, office, or hospital.

In recent years it has been an increasing practice for the hospital administration to contract or employ physicians and, in purveying their medical abilities as part of hospital service, the hospital assumed that responsibility for medical care. The original 'Medicare' proposals, and the bill as passed by the Senate, would have locked into law the practice of physician employment by hospital administrators.

'Eldercare' amendments to the Kerr-Mills law were adopted and will provide state and federal general revenue funds for health services of all types to the welfare categories of Aged, Blind, Permanently Disabled or Needy Families with Children. At the discretion of each state, health services may be provided needy citizens in these categories not receiving cash benefits because their income is just above the criteria for eligibility (Medical Aid for the Aged and Needy). Beginning July 1, 1966, the state of Florida will subscribe Voluntary Supplemental Insurance for aged welfare recipients which will pay physicians for medical services.

Providing for physicians' services wherever rendered through a method of financing separate from payment for hospital care will tend to diminish unnecessary hospital utilization. In addition, separate payment for physicians' services, diagnostic and therapeutic, in the hospital will provide a means whereby physicians may not only retain but improve their position of responsibility for medical care in the hospital.

The medical staff should now employ physicians where necessary to provide certain medical services in hospitals, especially those requiring medical administrative duties. A portion of fees from the Voluntary Supplemental Insurance Fund paid for medical services to welfare recipients may be received directly into a staff fund by resolution of the staff and with agreement of the physician involved. These funds can then be used by the medical staff to compensate for medical and medical administrative services, and continuing postgraduate education.

In less populous areas, perhaps the county medical society should assume the responsibility for medical care in hospitals by establishing a medical society fund into which, by resolution and agreement, all or a percentage of such fees could be deposited.

The Florida Medical Foundation, established in 1956, has been used to a limited degree for this purpose but sufficient to establish legal precedent, income tax exemption, and method by which hospital medical staffs and county medical societies may conveniently use this legal entity for a variety of purposes. A staff or society, simply by letter, may arrange for the Foundation to be the trustee of funds to be released in the manner prescribed by the depositor and insure that medical staff funds will be separate from the hospital administration account.

Physicians may now choose to assume fully the responsibility for medical care in hospitals by appropriate action of medical staffs and county medical societies. Inaction or delay will inevitably force the hospital administration to assume the responsibility by employing physicians to provide medical services as an integral part of hospital care. There is no middle course. Adequate medical care wherever needed supervised by physicians is the surest method of circumscribing the extent of social security tax-supported health care and preventing the inclusion of physicians' services which would lead inevitably to federal employment of physicians—a catastrophe for quality medical care and the social security taxpayer.

The American Medical Association may give counsel, the State Medical Associations can provide a plan, but each hospital medical staff and county medical society must act to adapt the plan to their specific needs in order to assume the responsibility effectively for medical care in their environment.

For the purpose of providing good medical care to the sick, the physician, through the hospital medical staff and county medical society, must retain responsibility for medical care in order to have freedom to choose and prescribe a regimen for the patient.

H. Phillip Hampton

Editorials

Early Florida Dermatologists and Their Specialty Society

The first meeting of the Florida Society of Dermatology was held in Jacksonville on June 8, 1930. Dr. J. Lee Kirby-Smith of that city was appointed temporary chairman for the meeting. The other physicians present were: Drs. Elmore D. French of Miami, Chadbourne A. Andrews and J. J. Saxton of Tampa, and T. A. Blinn and J. Frank Wilson of Jacksonville. A motion was made and carried that the rules and by-laws be drawn up and that meetings be held quarterly in different locations in the state.

It seems appropriate that some biographical information on the charter members should be given here. Dr. Joseph Lee Kirby-Smith was the youngest of 11 children of General and Mrs. Edmund Kirby-Smith. He received his M.D. degree from the University of the South and did graduate work in New York City, including training at the New York Skin and Cancer Hospital. He came to Jacksonville in 1911 and was a pioneer in the field of tropical medicine. One of the leading dermatologists in the South, he contributed to the knowledge of many diseases. Among the most outstanding accomplishments was his work in creeping eruption. He was greatly admired by his colleagues for his diagnostic ability and clear-cut acumen. Throughout the minutes of the Society were evidences of the great energetic drive of the man. His enthusiasm was one of the factors that kept the standards of dermatology in Florida at a high level during his lifetime.

Dr. Elmore D. French of Miami was graduated from medical school in Galveston, Texas. In 1933, after receiving board certification, he established the first dermatology clinic in Miami. Dr. French was a capable man who was a devoted student of dermatology. Only a few years before his death, I took a refresher course with him in New York. He would return to his room in the evening, go over our notes carefully and then send them to his secretary who would type them for us. My close association with Dr. French in Florida is a source of great satisfaction to me.

Dr. Chadbourne A. Andrews of Tampa contributed to the Society by his constant enthusiasm and willing cooperation. I am sure that our Dr. Morris Waisman, who was with him for many years, could tell us many instances that would illustrate why he was so highly regarded by his colleagues and patients. Dr. Andrews practiced full time dermatology from 1922 until his death in 1961.

Dr. J. J. Saxton of Tampa was taken from us in June 1936 in an automobile accident. He was killed while driving to Jacksonville for one of the group's meetings. Dr. Andrews was in the car and was seriously injured.

Dr. T. A. Blinn moved away only a few years after his name appeared as one of the Society's founders. He was born in 1880 and discontinued his practice in 1932.

Dr. J. Frank Wilson was born in Milledgeville, Georgia, in 1894 and came to Jacksonville after World War I. He practiced there for 25 years. Because of failing health he confined his practice to his home for several years before his death in 1962.

To anyone who has known any of these men it is a great temptation to eulogize their many fine qualities. Through them, the Society has been left a great tradition, which undoubtedly has contributed to the continued improvement of the standards of dermatology. Many years ago, the Society was one of the first state dermatology

groups to be recognized by the Archives of Dermatology. Through the instigation of Dr. Kirby-Smith, invitations were extended to dermatologists throughout the Southeast to meet with the Florida Society. Thus the Florida group became the parent of the Southeastern Dermatology Association.

Meetings of the Society were not just cursory affairs. Although the members enjoyed one another's company, and each meeting had its pleasurable events, it is evident that great effort was made to make all meetings scientifically interesting. For many years the cases presented and the discussions were recorded in the minutes. Throughout the minutes, there also were many illustrations of patients presented. To the members who came along after the founding, the scientific emphasis of the Society was evident. Although in recent years there has been an increasing emphasis on the economics of medicine, the primary objective of the organization always has been the betterment of dermatology in Florida.

It has been a rewarding experience for me to have briefly reviewed the history of dermatology in Florida and it is my hope that all dermatologists may benefit from the inspiration it should bring to continue the fine work that was begun by the Society's charter members. The Florida Society of Dermatology has contributed much to the practice of medicine in Florida. In addition, many of its members have furthered the practice of dermatology in this country and even in foreign lands by their participation in programs and in holding places of leadership. It is hoped that its members will continue to carry out the high goals set for us by our founding fathers.

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JACKSONVILLE

The Chihuahua and Asthma

Acquiring a Chihuahua to benefit asthma is a widespread American practice. Tippins's article (JFMA 52:246) confirms the impression that some asthma sufferers are subjectively benefited when they acquire these tiny, short-haired dogs. One may logically ask, "Why?" and "Can these animals ever make the condition worse?"

People who have chronic asthma are nearly always introspective and emotionally involved with their disease. The acquisition of a comment-provoking animal, which will respond with affection and whose care is time-consuming, is a powerful psychological stimulus against self-centered thought.

Several years ago I polled a group of pediatric allergists concerning this problem, and each physician strongly opposed the acquisition of a hairy pet by allergic children (Pediatrics 21:845). Many experts believe that an allergic person may not be sensitive to a hairy animal when it first comes into the home, but that eventually he will become so. Since nearly all persons with respiratory types of allergy are sensitive to dust and since hairy animals are dust catchers, it is logical for the patient with such involvement to have a small dog with short hair, as is the Chihuahua, it he is to have any type at all. The Mexican hairless dog may be an even better-tolerated breed. While the skin of many dogs is not tolerant to frequent soap baths, it is recommended that hairy pets around allergic persons be washed as frequently as feasible.

Purely speculative is my conjecture that perhaps these tiny creatures may temporarily benefit an asthmatic person by being a sort of electrically charged, slightly oily mop which picks up dust, molds and other respiratory inhalants as he climbs into, over and below and generally all over the place, including the bed. Against this theory is the common observation that a larger dog with longer hair which could pick up even more particles does not benefit the sufferer.

Into the home of a couple who were devoted owners of an elderly Chihuahua came a new baby. The child had severe asthma in early life and I urged these parents to get rid of the dog. Finally the problem was solved by the animal's death. The child improved rather promptly, but of course one could not be sure that breaking contact with the dog was the reason.

How long an asthmatic person will be benefited after he gets a Chihuahua is most important in considering this interesting puzzle. It is hoped that Dr. Tippins will do a follow-up study in a few years on the 21 persons who "claimed definite improvement" when they acquired their canine friend. His problem will be a difficult one as most dog owners consider their own animal blameless, indeed often above reproach.

HUGH A. CARITHERS, M.D.
JACKSONVILLE

Others Are Saying

From Russia Sans Love

Richard M. Fleming, M.D.

Three years ago I visited the Soviet Union to attend the Eighth International Cancer Congress. While there I had the opportunity to see some of the hospitals, clinics and laboratories and observe first hand their medical techniques and practices.

One of the most novel experiences of the trip was a visit to the Scientific Research Institute for Experimental Surgical Apparatus and Equipment in Moscow. We were shown a variety of surgical instruments which were chiefly automatic suturing devices based on a modification of the old Von Petz Clamp. Our hosts presented the instruments as if they represented an entirely new concept. The much heralded blood vessel anastomosis clamp was demonstrated to us and we found it to be a well engineered precision instrument although it is somewhat of a chore to prepare the instrument for use.

There is an interesting story concerning the vascular clamp and the development (or rather the lack of development) of vascular surgery in the U.S.S.R. Apparently a central committee had reviewed the problems of vascular surgery and decided that if this surgical field were to be properly developed, an instrument must be devised which would rapidly and accurately anastomose blood vessels. Accordingly, an all-out effort was mounted with the cooperation of surgeons, engineers, machinists, physiologists, etc., and this beautiful instrument was developed. When clinical trials were finally conducted, the instrument proved to be bulky, difficult to use and impractical. At the time we were there it had been used very little or even discarded after a brief trial in some clinics. Meanwhile, other phases of vascular surgery had been developing at a snail's pace; very little surgery was being performed on the aorta or peripheral arteries at the time of our visit.

By contrast, in the free world, investigators in hundreds of laboratories had moved in whatever direction their findings led them and they developed an entirely new field of surgery before the Russians had started.

With the above comparisons in mind, it is difficult for me to understand why the President's Commission on Cancer, Heart Disease and Stroke, would propose to further centralize medical activities in this country. Yet the Commission recommended that "planetary systems" of medical service be developed, with certain universities as the hub of this complex, linked to "Diagnostic and treatment centers (400 of these!) and community hospitals." This would lay the groundwork for the establishment of central planning committees to direct all research *and* treatment protocols! It is ironical that of the dedicated men who have made this proposal, at least one of the members has visited the Soviet Union, seen and heard the things I've reported, and criticized this aspect of Russian medicine.

Under this plan the universities might eventually find they have been delegated responsibility for medical care for the entire population. The universities have problems enough in providing undergraduate, graduate and post-graduate education, as well as doing the bulk of the research. Besides this, they participate in patient care to the extent necessary to provide for the training of students, internes and residents and thereby set the standards for hospital practice throughout the country. I cannot conceive of the universities willingly accepting this additional burden implied in the Commission's recommendations.

Furthermore, such concentration of authority in the hands of a few chiefs of departments smacks of a reversion toward the old German Chefarzt-Herr Professor system so prevalent before the Halsted concept of resident training took roots in this country.

Thus it would seem that by adopting these proposals of the President's Commission, we would embrace the worst of two systems, as we take two giant goose-steps backward.

The Bulletin
Dade County Medical Association
July 1965.

Association News

Council on Voluntary Health Agencies

The Council met May 29, 1965, in the Association's headquarters building in Jacksonville. The status of three pending applications of statewide voluntary health agencies for official FMA recognition was reviewed, and it was decided that no further action by the Council was indicated at the time in any of the cases. A discussion was held of the use by agencies of the FMA recognition in fund raising and other activities. Recommendations for limitations of such use were formulated for presentation to the Board of Governors.

A twelfth new criterion was developed for addition to the previous 11 criteria required for official recognition of agencies by the Association. It reads: "Must be ethically sound and in operation long enough to be evaluated." The Council also considered the possibility of encouraging the establishment of some mechanism for joint accreditation of voluntary health agencies and decided to discuss the subject with the agency directors in the next joint meeting with that group.

The Council noted that the new Charitable Solicitations Act was passed during the 1965 session of the Florida legislature. Two members of the Council, Drs. Mason Romaine III and Hawley H. Seiler, had served on the advisory committee to the Secretary of State which had studied the problem and drawn up the bill.

Considerable attention was given to the need for implementing voluntary health agency activities by the county medical societies. The Council's proposed new pamphlet for county societies was reviewed and final approval given.

Ways and means of solving the problem of numerous mail solicitations by various health-related organizations outside the state were considered and recommendations were made for study of this matter in the public interest. The Council also noted that the 1965 Institute for Florida Voluntary Health Agencies was being held August 26-28 in Miami Beach, and urged participation and support of this meeting by members of the medical profession. The final item considered by the Council was the medical research activities of United Health Foundations, Inc., and their effect upon the research programs of the voluntary health agencies.

Council on Allied Professions and Vocations

The Council met July 25, 1965, in the Robert Meyer Motor Inn, Orlando. Considerable attention was given to a review of the actions of the 1965 House of Delegates affecting the Council and its committees.

Individual committee programs and activities were considered and the following significant actions were taken:

LAW.—Steps will be taken to secure early adoption by the Florida Bar of the Florida Professional Medico-Legal Code approved by the 1965 House of Delegates.

PHARMACY.—It was decided to recommend to the Board of Governors the deletion of the section of the Florida Interprofessional Code for Physicians and Pharmacists dealing with physician ownership of pharmacies and dispensing of drugs. The Committee on Pharmacy was requested to complete its project of development of a standard prescription form.

RELIGION.—The Committee on Religion was requested to take necessary steps to implement the medicine and religion program through the county medical societies.

X-RAY TECHNICIANS.—The Council voted to endorse the recommendation of the Executive Committee of the Board of Governors to change the name of the committee to "Committee on Radiologic and Nuclear Medicine Technologists."

Council on Medical Education and Hospitals

A meeting of the Council was held Aug. 1, 1965, in the Association's headquarters building in Jacksonville. After reviewing actions of the 1965 House of Delegates affecting the Council, members of the Council considered the possibility of changing the present minimum of 10 beds for hospital licensure to 25 beds. It was decided to determine the number of hospitals with 25 or less beds before proceeding with more definitive recommendations. The matter was referred to the Committee on Hospitals for further study.

Following a discussion of health facilities planning, it was recommended that a state voluntary planning committee or council be formed as soon as possible, and that all necessary assistance be provided to local groups to encourage the formation of such committees in all areas concerned.

The Council endorsed its program of liaison visits to the medical schools of the state, which are carried out by the Committee on Medical Schools, and decided to continue them. Considerable attention was directed to the proposed establishment of additional medical schools and other professional schools in Florida. With the purpose of ascertaining need, physician licensure statistics for the past two decades were carefully studied. Noting that Florida has no difficulty in attracting physicians trained elsewhere, the Council voted not to favor creation of another medical school until such time as the present schools are being utilized to their fullest capacity and have reached their maximum extent of development. The Council also recommended that the FMA become better acquainted with the problems of the medical schools and more intimately involved in planning for their expansion and for additional schools. A joint meeting on the entire subject was urged between the Council and the Committee on State Legislation.

Other matters considered by the Council were the corporate practice of medicine with respect to certain hospital-centered specialists and the encouragement of senior medical students to enter internships in the state.

Council on Medical Services

In its first session since prior to the 1965 FMA annual meeting, the Council met August 8 in the Robert Meyer Motor Inn, Orlando. Considerable attention was directed to actions of the House of Delegates having application to the Council and any of its 13 committees. The programs and activities of each individual committee were reviewed in depth and suggestions and recommendations were made for future implementation. In opening the meeting, Council chairman Dr. Irving E. Hall emphasized the important responsibility of each Council member to participate actively in the deliberations concerning all other committees, in addition to his own. A brief summary follows of major activities of each committee which were considered and approved by the Council.

AGING.—FMA representation on the Florida Joint Council on Health of the Aging, the accreditation and licensure of nursing homes, and the components of coordinated home care programs were among the subjects of concern. It was suggested that the committee establish close liaison with the Division of Hospitals and Nursing Homes of the State Board of Health and it was noted that the committee is the Association's prime liaison unit with the Florida Nursing Home Association.

BLOOD.—Efforts of commercial insurance organizations to enter the blood field were described. Reports were presented of the committee's attendance and participation in various meetings on state and national levels. Plans by blood banks to establish state and national computer systems for blood were explained.

CHILD HEALTH.—A wide variety of activities was reported in the committee's role as School Health Medical Advisory Committee to the State Department of Education and State Board of Health. Among the activities were development and revision of health forms of all types used in the schools, review and evaluation of health education programs and textbooks, and planning for a pilot venereal disease testing program in the schools.

EMERGENCY MEDICAL SERVICE.—Consideration was given to hospital disaster plans and the use of mobile emergency hospitals. A review was held of the committee's function in advising the Selective Service System relative to the essentiality of physicians being called into the military services. It was recommended that the committee also be given responsibility for advising, upon request, concerning the essentiality of physicians ordered into active duty from the Reserve.

HEARING.—Problems pertaining to speech and hearing clinics received attention. Committee activities approved included recommendations for referral to clinics, a hearing testing program in the schools, donation of temporal bones, standards for hearing aid dealers, and provision of medical services to indigent children with hearing problems.

INDIGENT CARE.—A general discussion was held of the committee's future role and it was decided that its attention should be directed largely toward the philosophical realm rather than toward the practical implementation of legislation.

LABOR.—Organized labor's long range plans in the health and medical field were reviewed. It was suggested that the committee continue to explore additional avenues for establishing a means of continuing liaison with organized labor in the state.

MATERNAL HEALTH.—The committee's continuing maternal mortality survey was described and the status of the state obstetric practice guide was discussed.

MENTAL HEALTH.—All legislative measures pertaining to mental health which passed during the 1965 session of the Florida legislature were reviewed. Pressing needs were described. Among committee activities approved were field visits to correctional institutions, participation in PKU testing planning, and a conference of key state mental health leaders.

MENTAL RETARDATION.—Consideration was given to problems regarding PKU testing, the State Division of Mental Retardation, and the establishment of community mental retardation programs.

PUBLIC HEALTH.—Areas of concern to the committee receiving the Council's attention were the increasing use of raw milk and the need for a statewide pasteurization law, the need for additional tuberculosis beds, a study of laboratories doing exfoliative cytology work, a broad range of problems pertaining to venereal disease, and the use of "do-it-yourself" Papanicolaou smear kits. The committee was requested to undertake a thorough study of the raw milk problem and to develop specific recommendations for action.

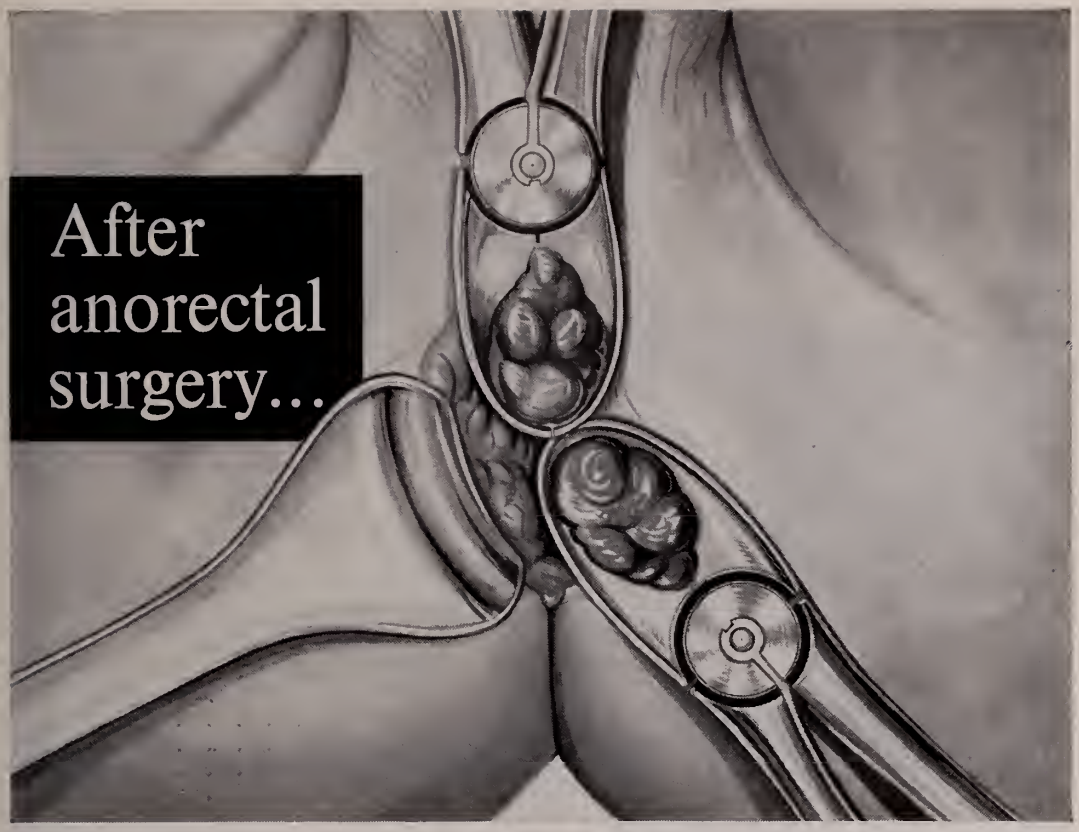
RURAL HEALTH.—Liaison and other cooperative activities with agricultural and allied groups through the joint Florida Committee on Rural Health were reviewed. Also described was the committee's participation in the AMA National Conference on Rural Health held in March in Miami Beach.

VISION.—Matters upon which the committee will be developing recommendations during the coming year are the revision of recommendations for eye testing equipment in the public schools, referral by schools and health departments to ophthalmologists and optometrists, and the entire scope of relationships between medicine and optometry.

The final subject receiving the Council's consideration was the medical ramifications of the various programs under the Economic Opportunity Act.

Subcommittee on Inter-American Relations

The Subcommittee met Aug. 9, 1965, in the Association's headquarters building in Jacksonville. A discussion was held of the hospital dedication ceremonies of July 4 in Trujillo, Honduras, and subsequent activities aimed at making the FMA-sponsored hospital operational. It was pointed out that the Honduran government has cooperated fully in every phase of the project. Although considerable progress has been made to date, the Subcommittee stated that the three most critical problems facing the program at the present time are: (1) finding a successor for Gordon G. Allison, M.D., medical director recently resigned because of illness; (2) securing physicians of all specialties to serve at the hospital on a rotating basis, and (3) obtaining financial assistance for all aspects of the project. The Subcommittee appeals to physicians throughout the state to help in any manner deemed appropriate and will furnish complete information upon request.



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Deaths

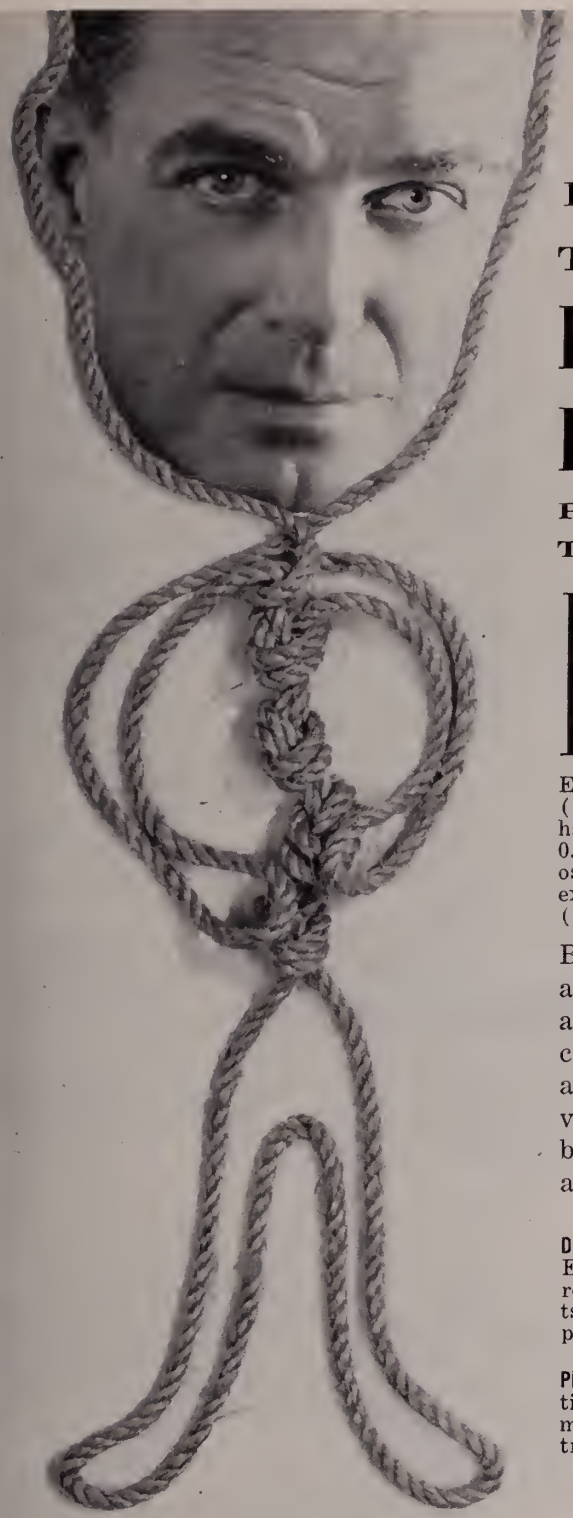
Adams, Thomas Shaw, Jacksonville; born in North Augusta, S. Car., in 1891; Georgia College of Eclectic Medicine and Surgery, Atlanta, 1916; interned at Georgia Hospital, Atlanta, 1916; practiced one year in Jasper before serving from 1918 to 1948 in the Medical Corps of the United States Navy, retiring with the rank of captain; engaged in the practice of ophthalmology and otolaryngology from 1948 to 1959 in Hollywood before returning to Jacksonville where he had been stationed while in the Navy; was a city commissioner for two consecutive terms in Hollywood and a city councilman and candidate for mayor in Jacksonville in the 1930s; was instrumental in the founding of the U.S. Naval Hospital in Jacksonville; held membership in the American Medical Association and the Florida Society of Ophthalmology and Otolaryngology; died June 8, aged 73.

Banks, Keith Duane, Fort Lauderdale; born in Dumont, Iowa, in 1924; State University of Iowa College of Medicine, Iowa City, 1951; served an internship at Alameda County Hospital, Oakland, Calif., 1951-1952 and a fellowship at the Mayo Clinic, Rochester, Minn., 1958-1962; engaged in the general practice of medicine in Knoxville, Iowa, from 1952 to 1957 and thereafter in Fort Lauderdale; was a veteran of World War II, serving in the Army Air Force; held membership in the American Medical Association; died May 28, aged 40.

Chenault, John Watson, Sarasota; born in Sheridan, Wyo., March 24, 1904, University of Minnesota Medical School, Minneapolis, 1931; interned at Provident Hospital, Chicago; was a Rockefeller Fellow in Orthopedic Surgery, University of Chicago, The School of Medicine, from 1931 to 1934, and served residencies the two succeeding years at the State University of Iowa College of Medicine, Iowa City, and at the University of Chicago; was director of the Division of Orthopedic Surgery at Tuskegee Institute, Alabama, for 18 years and from 1941 to 1954 was also director of a polio center there, of which he was the founder; served as hospital administrator at Florida A.&M. University Hospital for two years; then engaged in the practice of general medicine and orthopedic surgery in Bradenton for four years and in Sarasota for five years; became a diplomate of the American Board of Orthopedic Surgery in 1950 and a fellow of the American Academy of Orthopedic Surgeons in 1951; held membership in the American Medical Association and the National Medical Association; died suddenly on March 16, aged 55.

Fabric, Ben Lue, Hallandale; born in Milwaukee, Wis., April 12, 1909; Marquette University School of Medicine, Milwaukee, 1935; interned at Milwaukee County General Hospital; served in the Army Medical Corps for three years during World War II, attaining the rank of captain; engaged in the general practice of medicine in Milwaukee for 15 years and in North Miami Beach for two years prior to establishing a practice in Hallandale; held membership in the American Medical Association; died April 7, aged 55.

Knauf, Arthur Raymond, Tampa; born in Sheboygan, Wis., Aug. 24, 1890; Rush Medical College, Chicago, Ill., 1916; interned in the Cincinnati General Hospital, Cincinnati, Ohio; in 1917 entered the Medical Corps of the United States Army as a lieutenant and was released to civil life in November 1918; in 1919 became a fellow in urology in the Mayo Graduate School of Medicine, Rochester, Minn., and received the degree of Master of Science in urology from the University of Minnesota in 1922; after brief periods of practice at the New Jersey State Hospital at Trenton, in New York City and in Milwaukee, Wis., he entered the private practice of urology in Tampa in 1925; was a past president of the Hillsborough County Medical Association; was certified by the American Board of Urology in 1936; held membership in the American Medical Association, American Urological Association, Association of Military Surgeons of the United States and Alumni Association of Mayo Graduate School of Medicine, and had been a fellow of the American College of Surgeons since 1928; died at the J. Hillis Miller Health Center, Gainesville, May 28, after a brief illness, aged 74.



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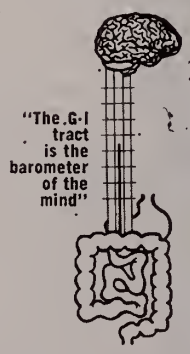

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News

Dr. William W. Thompson of Fort Walton Beach was installed July 1 as mayor of that city, following his election to the office in June. In medical circles, Dr. Thompson served as last president of the Walton-Okaloosa-Santa Rosa County Medical Society and first president of the new Okaloosa County Medical Society.

The Mound Park Hospital Foundation announces a postgraduate course entitled "Common Problems in General Practice- Office Procedures" will be held October 29-30 at Mound Park Hospital, St. Petersburg. Accepted for 14 accredited hours by the American Academy of General Practice, the course is co-sponsored by the Florida Academy of General Practice. Further details may be obtained by writing M. A. Barton, M.D., Mound Park Hospital Foundation, Inc., St. Petersburg 33701.

Copies of a leaflet entitled "The Ten Commandments for the Prevention of Alcoholism" are available without charge from William B. Terhune, M.D., founder of the Silver Hill Foundation and the Terhune Clinic of New Canaan, Conn. Information in the leaflet was excerpted from a paper by Dr. Terhune which appeared in the New York State Journal of Medicine in August 1964. Copies may be obtained by writing Dr. Terhune at Valley Road, New Canaan, Conn.

Ground breaking ceremonies for new intensive care and education and research buildings were held August 1 at Anclote Manor, Tarpon Springs. Financing for the psychiatric hospital's additions was raised through contributions and private capital by the Anclote Manor Foundation. Dr. Samuel G. Hibbs of Tampa, president of the Foundation's board of directors, officiated at the ceremonies.

The 1966 annual meeting of the American Thoracic Society, medical section of the National Tuberculosis Association, will be held May 23-25 in San Francisco, Calif.

The Seventh National Conference on the Medical Aspects of Sports, sponsored by the American Medical Association, will be held November 28 in the Benjamin Franklin Hotel, Philadelphia. Among topics on the program will be sports trauma to the head and neck, readiness for sports participation, weight control in wrestling, and the knee in sports. The conference will be held in conjunction with the AMA Clinical Convention.

The Third Fall Meeting of the American College of Physicians will be held October 7-9 at the Deauville Hotel, Miami Beach. It will be open to members, students, interns and residents without charge and to nonmember physicians upon payment of a $25 registration fee. Chairman of the local arrangements committee for the College is Dr. Franz H. Stewart of Miami. Other Florida physicians serving on the committee are Drs. Jere W. Annis, Lakeland; Jose J. Centurion, Coral Gables; H. Phillip Hampton, Tampa; Karl B. Hanson, Jacksonville; William J. Harrington, Miami, and Paul N. Unger, Miami Beach. Programs and registration forms may be obtained by writing Edward C. Rosenow Jr., M.D., Executive Director, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104. (For further information, see page 657 this issue.)

The 1965 annual meeting of the American Society for Colposcopy and Colpomicroscopy will be held November 6-7 at the Americana Hotel, New York City. Details may be secured from Fritz K. Beller, M.D., Associate Professor of Obstetrics and Gynecology, New York University School of Medicine, 550 First Avenue, New York 16, N. Y.

The University of Miami will receive a grant of $2,319,728 from the U.S. Department of Health, Education, and Welfare to be used toward construction of a new basic science building for the School of Medicine. Estimated total cost of the facility will be $7,940,000. The building, to be located adjacent to Jackson Memorial Hospital, will house the departments of anatomy, biochemistry, microbiology, physiology, pharmacology and pathology. Also included will be multidiscipline laboratories and the first wing of a central animal facility. Construction is expected to begin by July, 1966.

The Michigan State Medical Society will celebrate a century of service in medicine at a special centennial session September 19-24 in Detroit. A wide variety of events are planned for each day of the unique week-long meeting.

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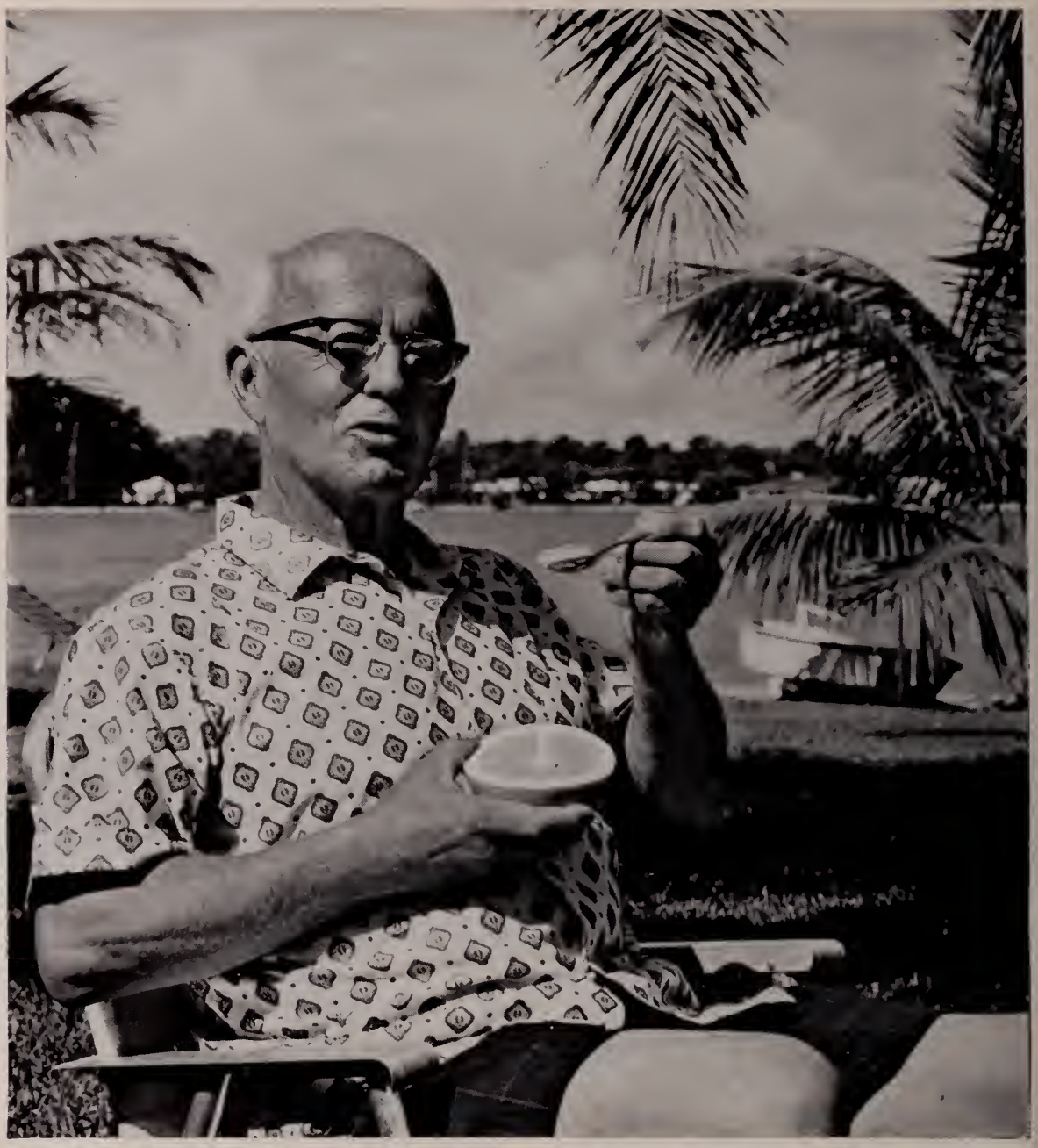

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IN BRIEF: ACTIONS AND USES: A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency anemia may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion *as a source of iron;* infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. of elemental iron in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylactoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache, and fever have occasionally been reported. Initial test doses of 0.5 cc. are advisable.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only, it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

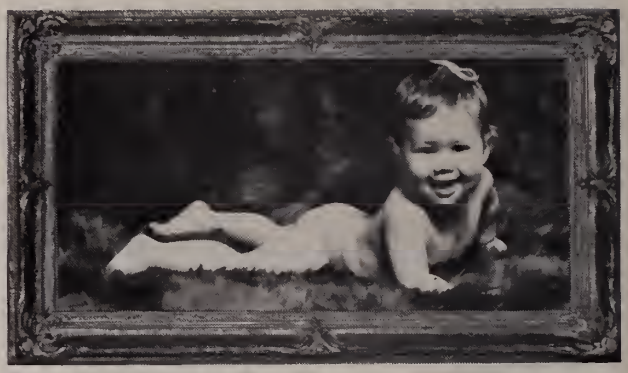
in iron deficiency anemia for rapid and predictable replacement of iron reserves

imferon®

(iron dextran injection)

LAKESIDE LABORATORIES, INC. • Milwaukee, Wisconsin 53201

Turn a bundle of colic into a bundle of joy



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PEDIATRIC PIPTAL® WITH PHENOBARBITAL

each cc. contains: 6 mg. phenobarbital (warning: may be habit forming); 4 mg. Piptal® (pipenzolate bromide), and 20% alcohol in a pleasant-tasting solution.

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1—Pomeranze, J., and Gadek, R.J.: Am. Pract. & Digest Treat. *8*:73-77 (Jan.) 1957

2—Asher, L.M.: Am. J. Digestive Diseases *4*:272 (Apr.) 1959

PIPTAL®
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PIPTAL®-PHB
(phenobarbital, 16 mg., pipenzolate bromide, 5 mg.)

IN BRIEF: PIPTAL—Each tablet contains 5 mg. pipenzolate bromide, PIPTAL-PHB—Each tablet (or 5 cc. of elixir) contains phenobarbital (warning: may be habit forming) 16.0 mg., Piptal (pipenzolate bromide) 5 mg. The elixir contains alcohol 20%.

Side Effects: Dry mouth, blurring of vision or drowsiness may occur.

Contraindications: Withhold in glaucoma, bladder or g.i. obstruction, cardiac arrhythmias and in sensitivity to anticholinergics or phenobarbital (Piptal-PHB). Caution should be observed in patients with prostatic hypertrophy.

Administration and Dosage: PIPTAL or PIPTAL-PHB Tablets: One tablet three times a day before meals and one or two tablets at bedtime. (PIPTAL-PHB Elixir: One teaspoonful three or four times daily for adults and children over six years of age.)

Supplied: PIPTAL (pipenzolate bromide) 5.0 mg. Tablets—bottles of 100. PIPTAL-PHB Tablets—bottles of 100. PIPTAL-PHB Elixir—bottles of 8 fluid ounces.

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Butazolidin®
brand of phenylbutazone

in osteoarthritis

Geigy

Therapeutic effects
A number of investigators report improvement in about 75% of cases. Relief of pain and stiffness is the predominant response. Frequently, there is also a significant improvement in function. The beneficial effects of the drug are usually seen by the third or fourth day of treatment.

There is general agreement that milder cases of osteoarthritis are preferably treated by simple analgesics. In many patients, however, this mode of therapy fails to give sufficient relief. Because steroids are not very effective in this form of arthritis, phenylbutazone affords the drug therapy most capable of relieving the more severe cases. For best results, it is recommended that treatment with phenylbutazone be combined with physiotherapy and other appropriate supportive measures.

Dosage
The initial daily dosage in adults is 300-600 mg. in divided daily doses. In most instances, 400 mg. daily is sufficient for maximum therapeutic response. A trial period of one week is adequate to determine the effects of the drug; if there is no improvement, discontinue the drug. When improvement does occur, dosage should be promptly decreased to the minimum effective level: this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

Precautions
Before prescribing, the physician should obtain a detailed history and perform a complete physical and laboratory examina-

should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools. Regular blood counts should be made. The drug should be used with greater care in the elderly.

Warning: If coumarin-type anticoagulants are given simultaneously, the physician should watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea and sulfonamide-type agents and insulin. Patients receiving such concomitant therapy should be carefully observed for this effect.

Side effects
The most common side effects are nausea, edema and drug rash. Infrequently, agranulocytosis, generalized allergic reaction, stomatitis, salivary gland enlargement, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia are also possible side effects. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently.

Contraindications
These include: edema, hypertension, or danger of cardiac decompensation; history

history of blood dyscrasia. Be
increased possibility of toxic r
drug should not be given wher
cannot be seen regularly, whe
patient is senile, or when othe
chemotherapeutic agents are
currently. Large doses of Buta
are contraindicated in patients
glaucoma.

Note: The physician should be
of dosage, precautions, side e
contraindications as containe
complete prescribing informat

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Each capsule contains:
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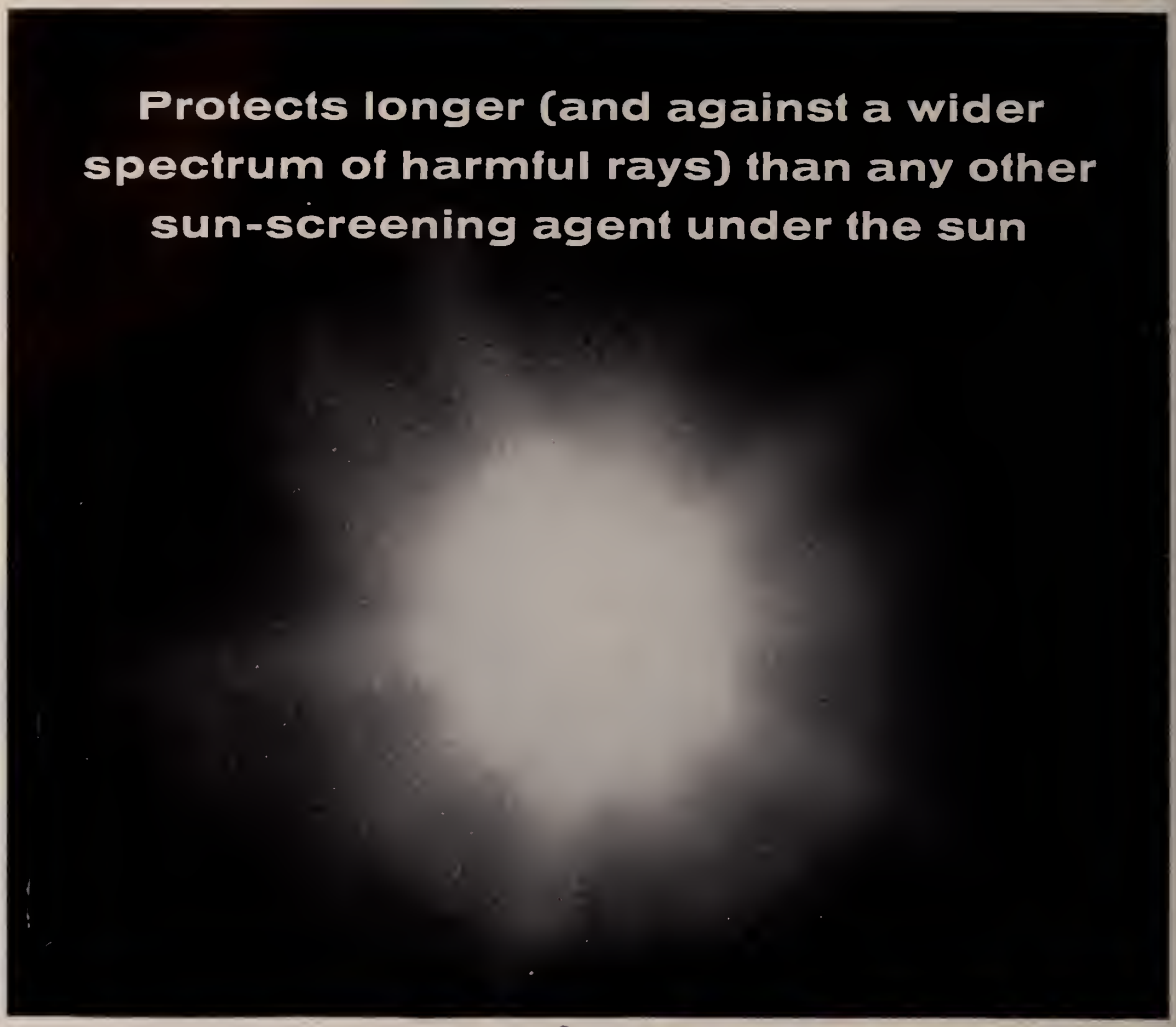

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References: 1. Goldsmith, J. W.: Minn. Med. (Feb.) 1957. 2. Groskloss, H. H., Clancy, C. L., Healey, E. F., McCann, W. J., Maloney, F. D., Loritz, A. F.: Clinical Medicine (Sept.) 1955. 3. Codling, J. W., Lowden, R. J.: Northwest Med. (March) 1958. 4. Bethea, R. C.: International Record of Med. (May) 1960. 5. Lenz, W., Second International Conference on Congenital Malformations, N. Y., N. Y., (July) 1963.

Side effects: the incidence of drowsiness and other atropine-like effects is low. However, caution patients engaged in activities where alertness is mandatory.

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- **serves as baseline therapy** for certain other more potent antihypertensive agents
- **permits lower dosage** of added potent antihypertensive drugs, minimizing incidence and severity of side effects
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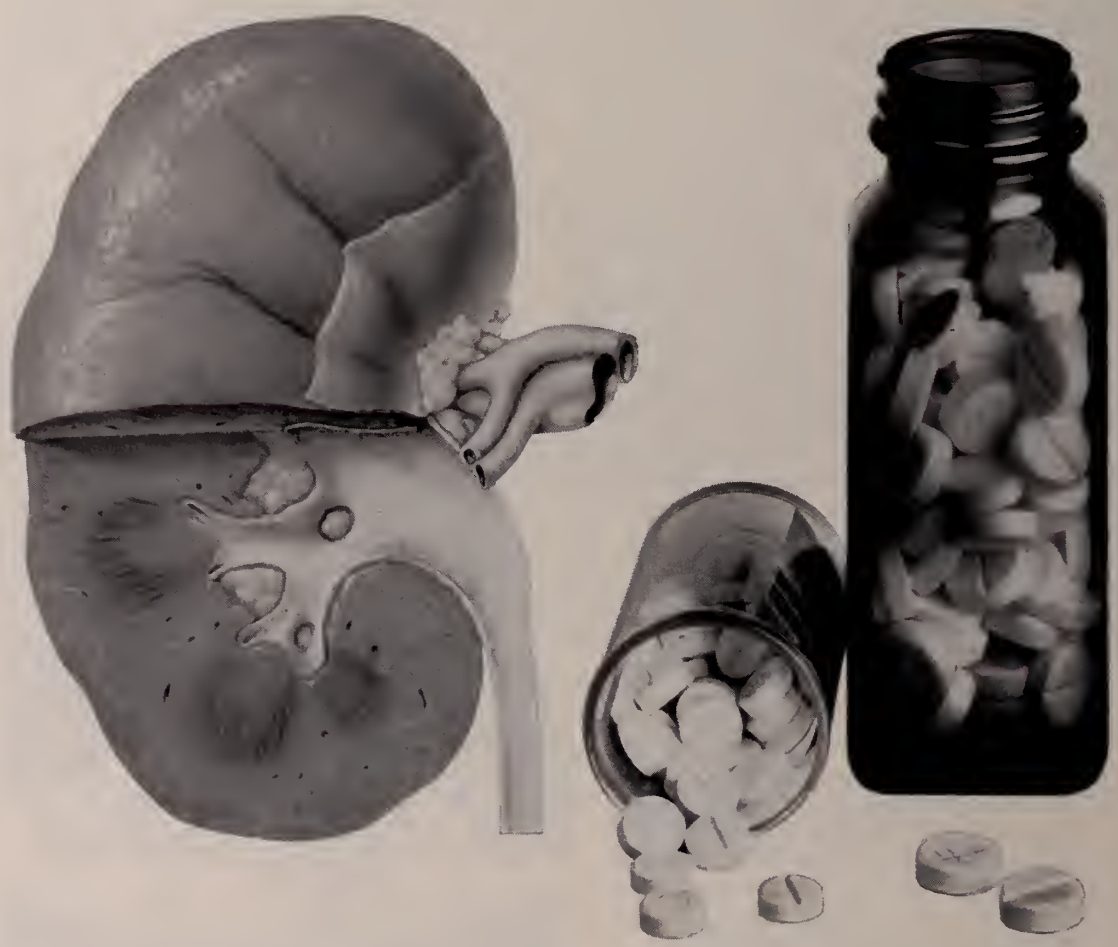

understanding... precedes development

The development of chlorothiazide and probenecid were events of major importance, but perhaps even more important for the future was the Renal Research Program by which they were developed. When Merck Sharp & Dohme organized this program in 1943, it was expressing in action some of its basic beliefs about research:

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• From knowledge thus acquired might come clues to the development of new therapeutic agents of significant value to the physician.

For example, the Renal Research Program put fifteen years into this search before chlorothiazide became available. But because these years had first led to a greater understanding of basic problems, the desired criteria for chlorothiazide existed before the drug was developed.

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Side Effects: Agranulocytosis, constipation, dizziness, dysuria, headache, hyperglycemia, hyperuricemia, impotence, leukopenia, muscle cramps, nausea, postural hypotension, purpura, thrombocytopenia, transient myopia, urticaria, vomiting and weakness.
Average Dosage: One tablet (100 mg.) daily with breakfast.
Availability: Tablets of 100 mg. in bottles of 100 and 1000.
For full details, see the complete prescribing information.

*Dorhout Mees,E.J.,and Geyskes, G.G.: Acta med.scandinav. 175:703,1964.

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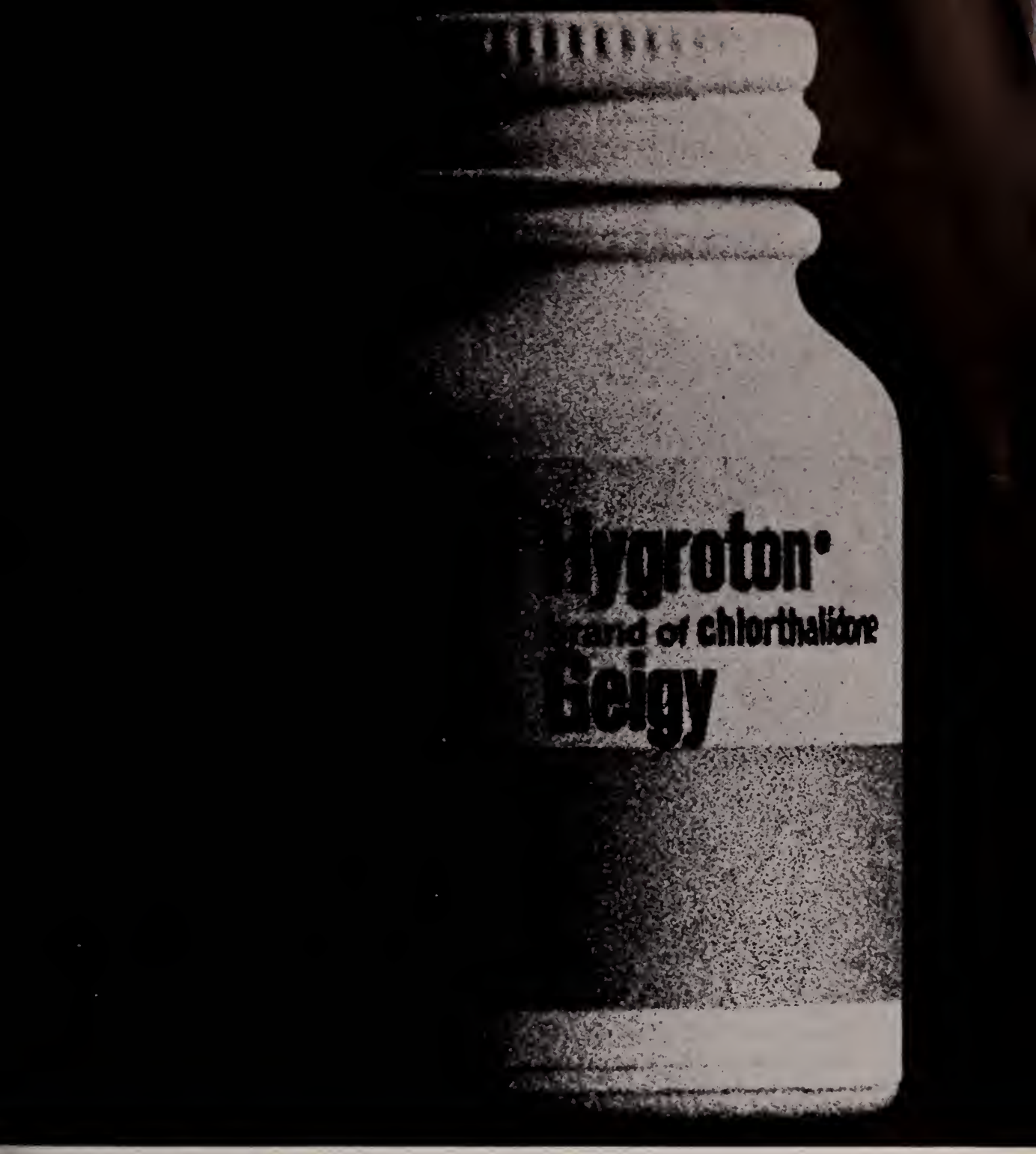

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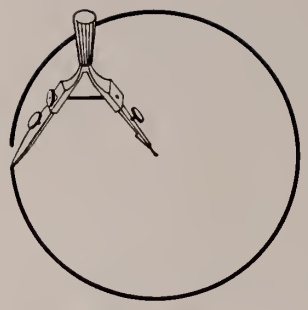

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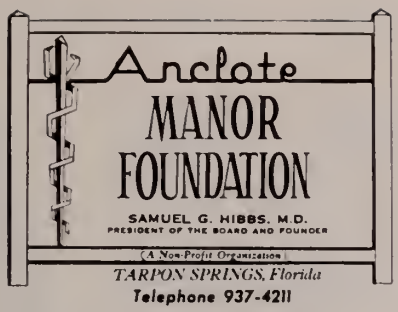

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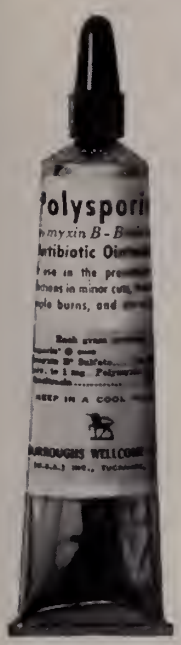

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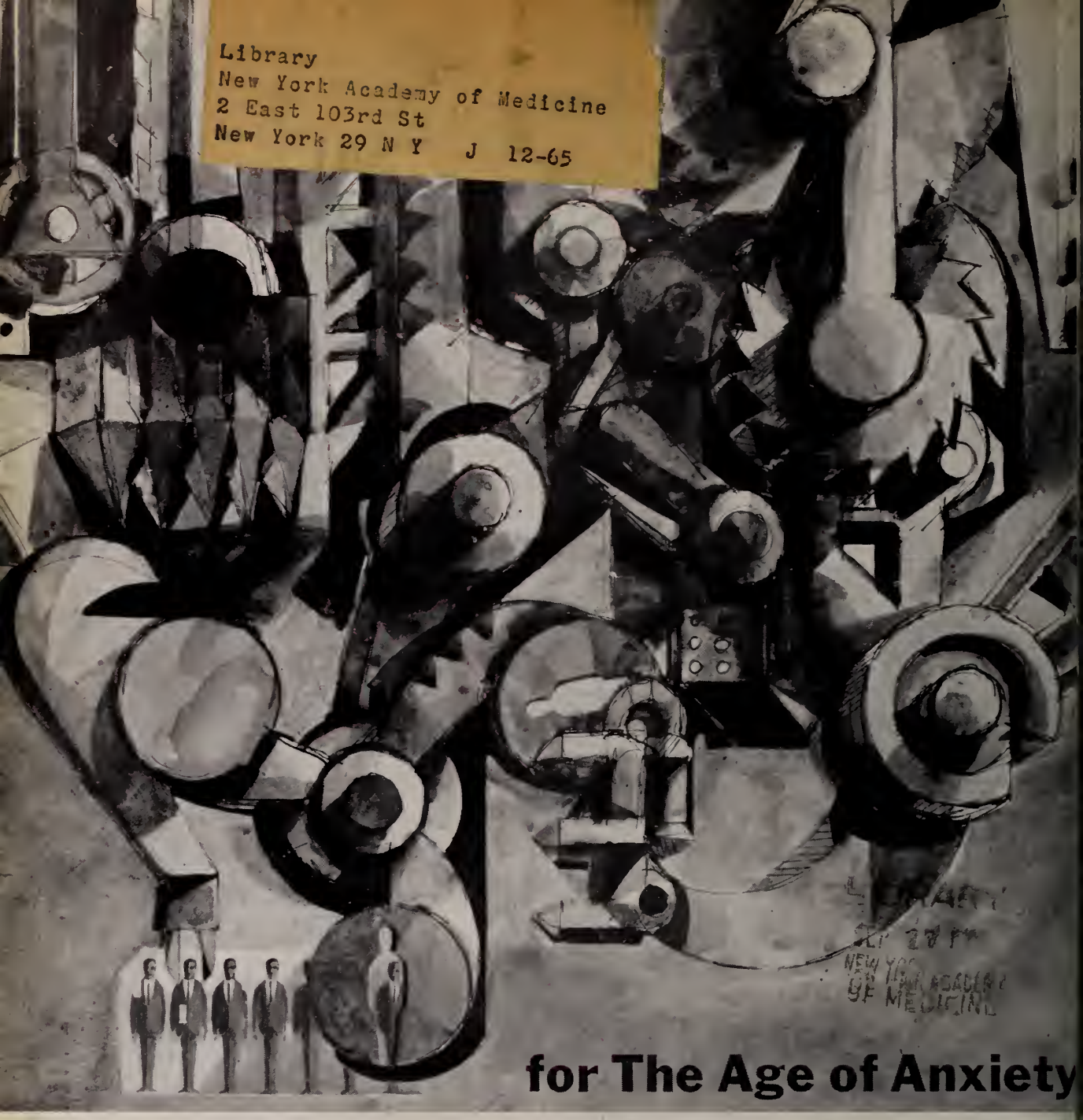

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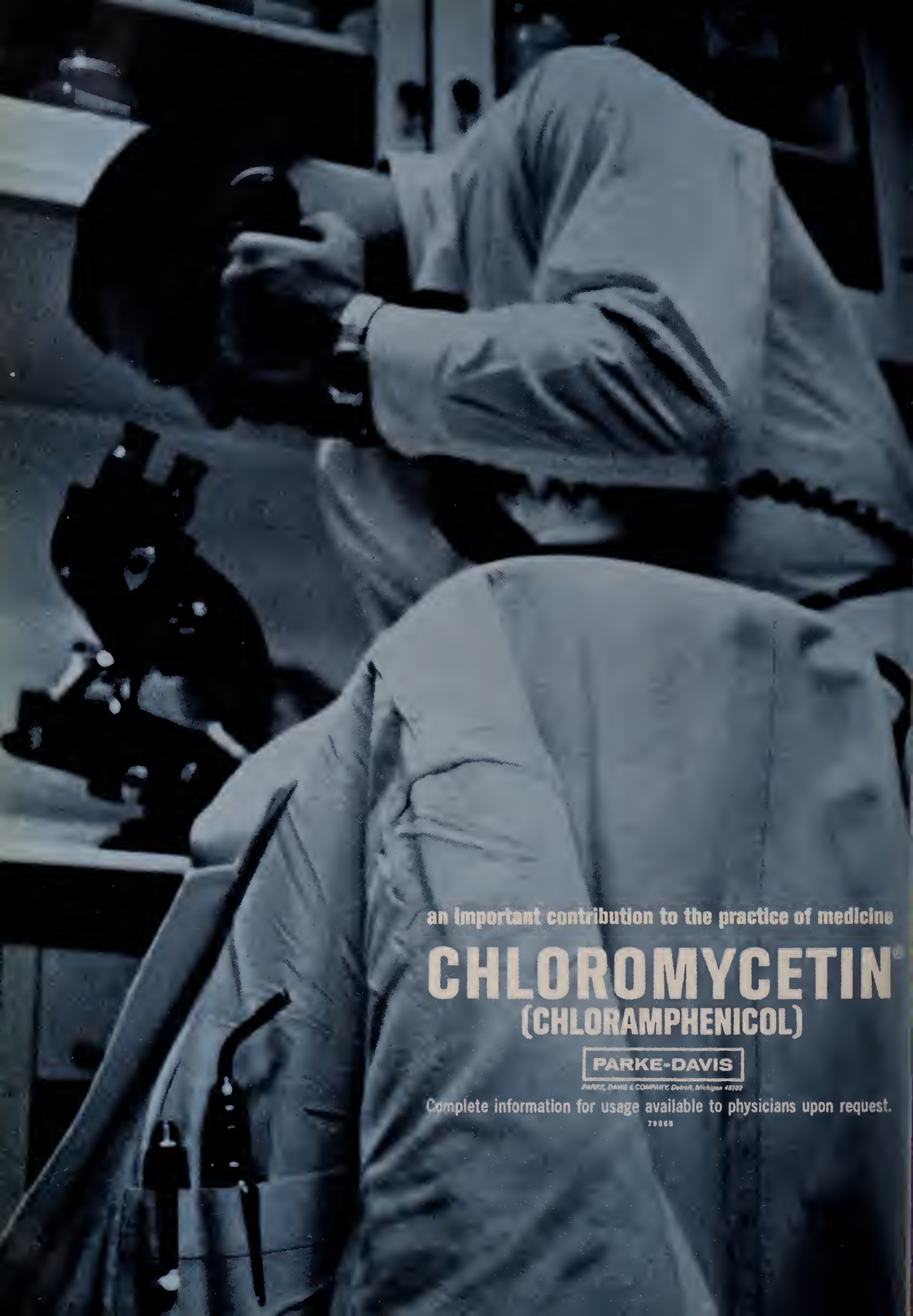
October, 1965
Vol. 62, No. 10

The JOURNAL of the Florida Medical Association

Psychiatric Responsibilities
Sport Scuba Diving
Skin Diving
Gastric Analysis
Simple Acute Diarrhea
Rupture of the Liver

Official Publication of the Florida Medical Association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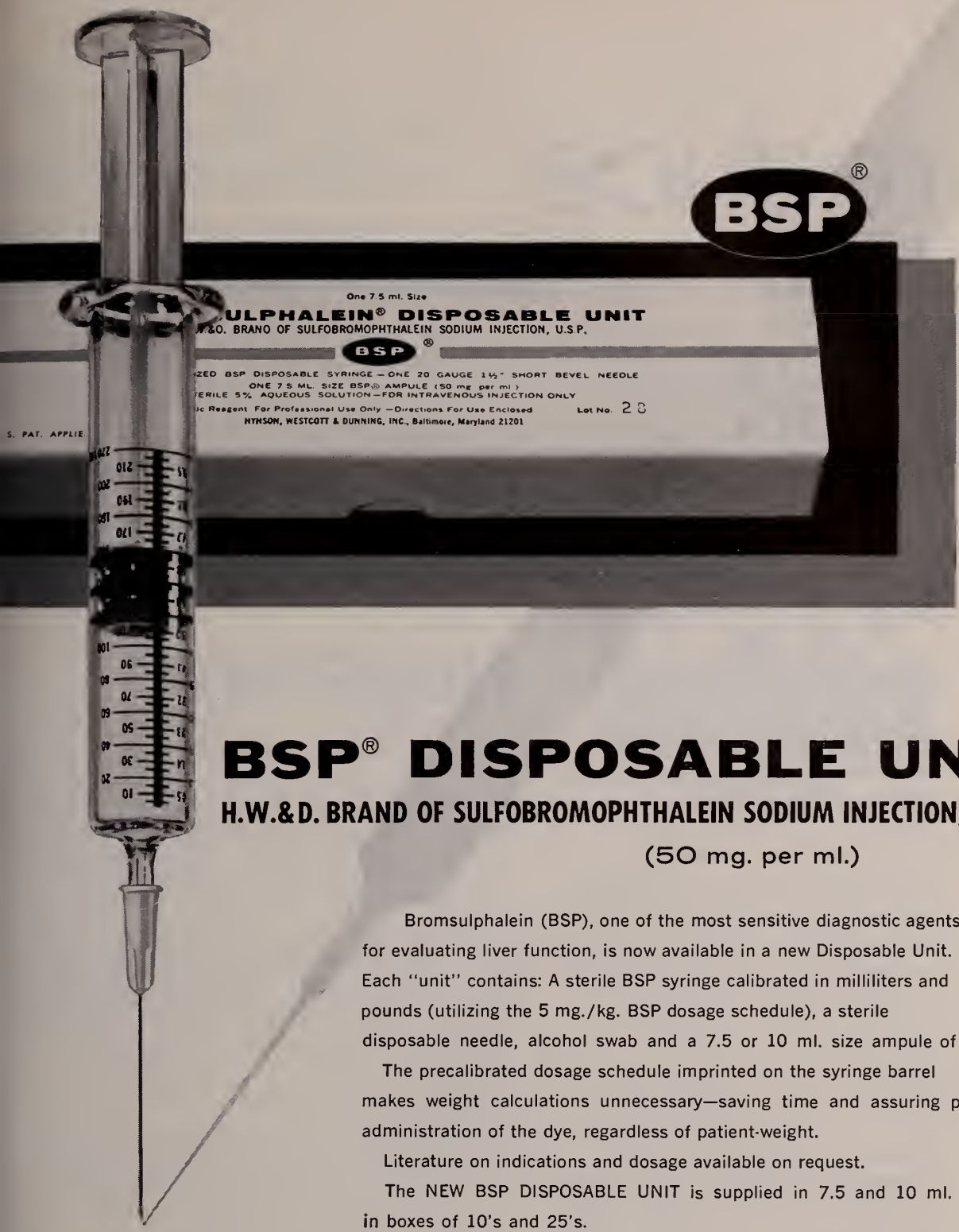

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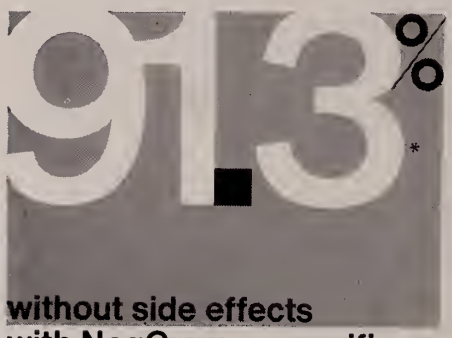

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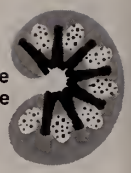

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References: (1) Carroll, G.: Urologists' Letter Club, June 1, 1964. (2) McDonald, D. F., and Short, H. B.: Address to the Fourth Interscience Conference on Antimicrobial Agents and Chemotherapy, New York, Oct. 26-28, 1964.

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The JOURNAL
of the Florida Medical Association

Volume 52, Number 10, October 1965

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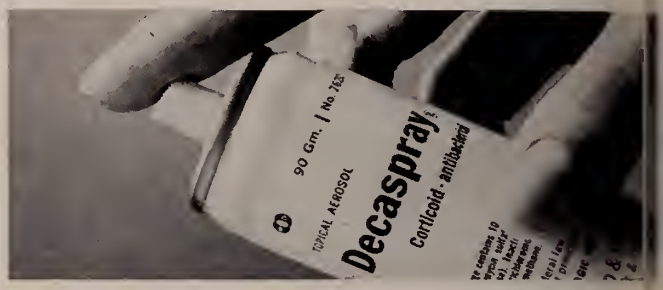

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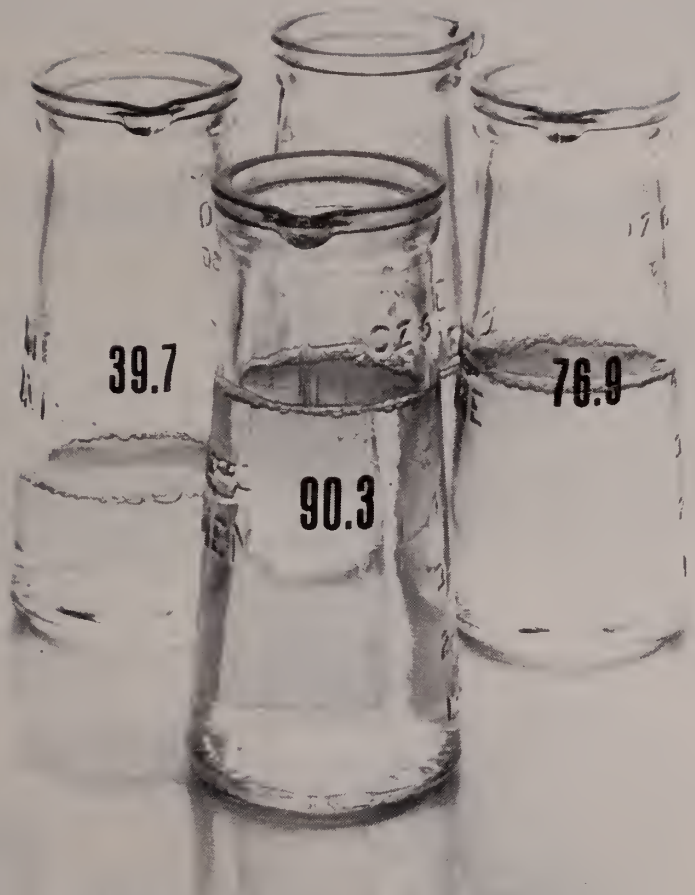

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*Gold, H., *et al*: Closed Panel Conference: Present Status of the Management of Congestive Failure and Advances in Diuretic Therapy, Journal of New Drugs, 1:177, July-August, 1961.

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Lehmann, H. E., Canad. Psychiat. Assn. J. *4(S)*: 1-12, 1959

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Meprobamate—Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses. Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single case of fatal bullous dermatitis after administration of meprobamate and prednisolone have been reported. More severe and very rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstituted. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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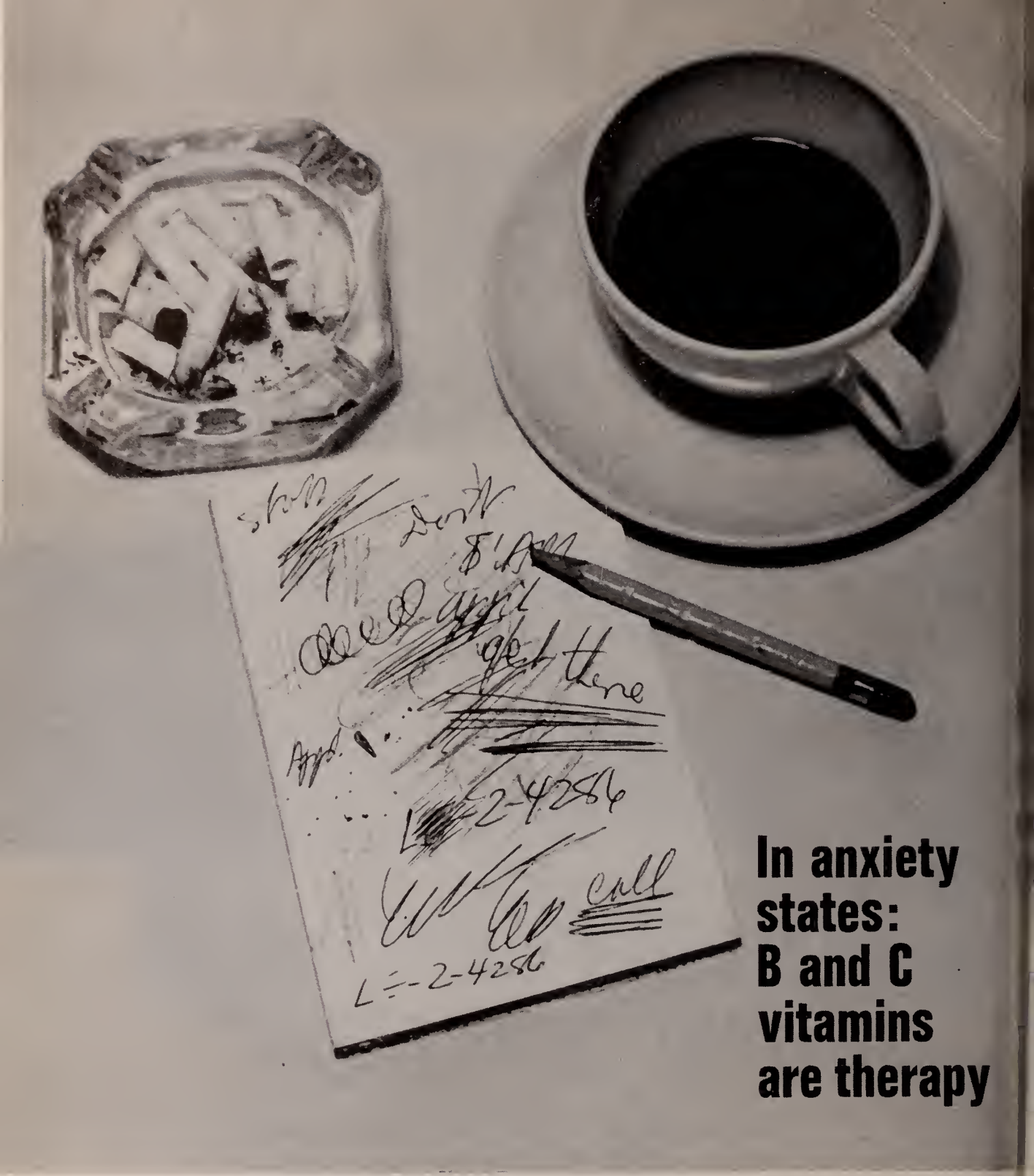

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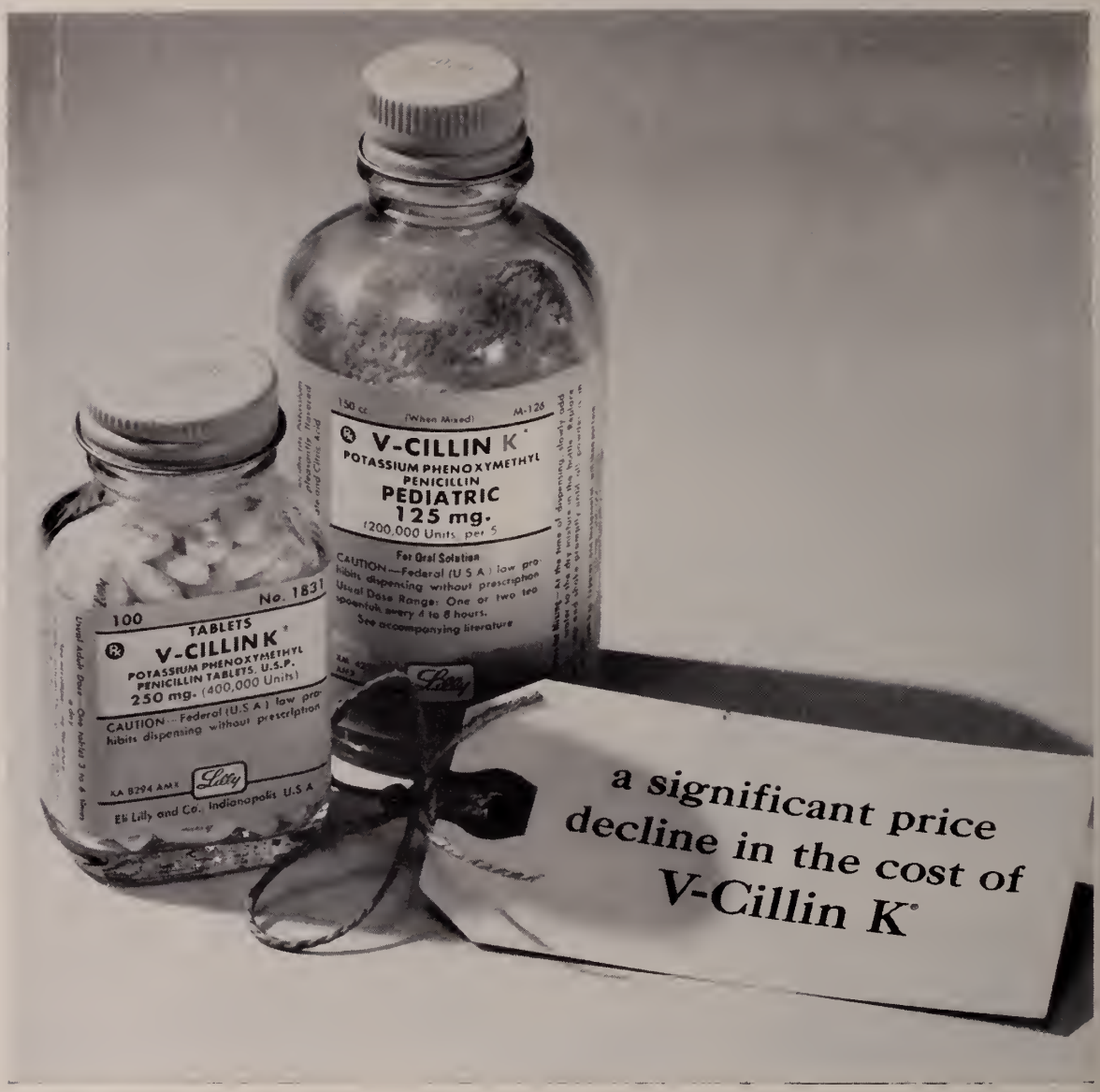

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The JOURNAL
of the Florida Medical Association

Psychiatric Responsibilities in Compensable Dependency States

PHILIP B. PHILLIPS, M.D.
PENSACOLA

Dependencies masquerading as illness in our increasingly paternalistic society and psychiatrists' role in evaluating the alleged disabilities merit special consideration. These states are common problems facing physicians in their daily practice, but not all dependencies are undesirable. Many are transient; some reflect loyalty to groups, faiths or strong leadership.

The psychiatric specialist plays an increasingly important role in our social structure. Not only is he frequently an aggressive campaigner on behalf of the mentally ill, but his evaluation and treatment of patients referred by social agencies have economic and social implications beyond the usual doctor-patient relationship. While the American physician values independent thinking, he has not generally participated in political activities to the extent merited by his education and community influence. It is important that his professional evaluations and judgments reflect his professional skills rather than his political philosophy. Emotionally inspired opinions may take the form of unfairness to the handicapped or needy unless the physician has sufficient insight to guard against this.

The neurotic dependent person who is eager for any financial aid he can get is all too familiar. This type is seen in many applicants for welfare and in the questionably disabled veterans who served a few months of duty in a training camp before being discharged as inadequate, yet who unhesitatingly try to identify with the truly disabled combat veterans compensated by a grateful government. Such neurotic dependency is also seen in self-diagnosed persons who claim Social Security benefits with the specious argument, "I've paid for it and I want it." This paper primarily concerns the self-diagnosed disabled.

The history of governmental activities in behalf of the needy reveals an amazing development. Concern for people afflicted by poverty and other old age social ills has found expression in public welfare measures from our country's early beginning. Communities and states originally assumed responsibility for the needy. By 1935 when the Social Security Act was passed, nearly all states had aid for widows, half had laws for the aid of the blind, and some 30 states provided for needy old people. Even by 1930 all but four states had workmen's compensation laws, and the federal government and many state and local governments had adopted retirement programs for their employees. The Social Security Act recognized the national interest in, and the scope of, the problem of income security. Nearly two decades elapsed after the passage of the original Social Security Act before any protection against the risk of disability was provided under the social insurance program. In 1959 more than half a million people were receiving cash benefits on account of disability. By 1963 after the 1960 amendments removed the age 50 requirement for cash benefits, this number had mushroomed to over a million and a half people.

Liaison with Governmental Programs

Practicing physicians have a twofold interest in this program. They should know the broad scope of the program and assist in advising patients who are prospective applicants for disability support. Also they should cooperate in providing medical evidence on which disability decisions are

based. Sound, properly presented medical evidence is absolutely necessary if accurate and just determinations are to be made economically and expeditiously. Physicians should establish constructive liaison with governmental programs which operate in areas in which the medical community has an interest. Over 52,000,000 workers have Social Security protection in event of disability (table 1). One and one-half million claimants are receiving monthly benefits at the rate of $100,000,000 a month. The medical evidence needed to make the determination of disability comes from the claimant's own physician or from hospitals and clinics in which he has been a patient. A consultative examination is required in some 40% of claims and these examinations are purchased from practicing physicians (table 2). Almost 12,000 examinations a month are purchased in initial claims alone at an average cost of $38 per examination. If special examination to determine continuing disability and appealed cases are included, then some $10,000,000 a year is being spent on medical consultation. State governments arrange for the consultant, set the fees and make the determinations as to the presence or absence of disability, in keeping with regulations and standards established by Social Security.

The Social Security definition of disability is "Inability to engage in any substantial, gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or to be of long continued and indefinite duration." To one who understands the intent of the program, this should be a clear and reasonable definition. The applicant must be actually unable, not unwilling or unmotivated, but unable to engage in any gainful activity. This inability must be medically determinable as physical or mental impairment. It is expected to be of long-continued and indefinite duration or to be one which leads to the expectation of death. Many claimants seem quick to diagnose themselves as totally disabled, while disability evaluators seek to interpret the regulations as they are written.

Table 1

Workers Protected Vs Disability	52,000,000
Receiving Monthly Benefits	1,500,000
Expense of Monthly Benefits	$100,000,000 Per Month

Table 2

Per Cent of Claims Requiring a Consultative Examination	40%
Consultative Examinations Purchased Per Month	12,000
Average Cost	$38
Spent Per Year for Consultations	$10,000,000

Sometimes well meaning physicians have thoughtlessly stimulated a iatrogenic disability by their kindly comment to the patient to "take it easy." A chronically dependent patient will seize upon this admonition and remember it long after anything else the doctor said has been forgotten. Such a suggestion becomes exaggerated in the mind of the patient and leads to a self-enforced inactivity more detrimental than helpful to the patient.

A common thread in these self-diagnosed disabled is a marked dependency state based upon a general inadequacy to cope with the stresses of life. It is more than limited education, deprived socioeconomic status, broken homes, loss of parental figures and all of the many supposed causes of neurotic disabilities. Yet undoubtedly many of these are factors in a great number of cases. The attitude of dependency seems to have a high degree of communicability. When one has an acquaintance or neighbor who receives a "government check" because of his "condition," one's own symptoms seem to get worse. A man will protest mightily his intense desire to work and how innocent he is of any malfeasance, yet admit sadly under questioning that he has tried but once to work and this attempt had such a disastrous effect on his health, he would not dare try again. Claimants will mention some neighbor or acquaintance who "isn't half as sick as I am" yet who has been drawing "his check" for many months. A system review by the physician elicits symptoms in every organ system and a few symptoms previously unreported in medical literature. Physical examination reveals the sad face with the wrinkled brow, a frown of pain, a drooping posture, a diffuse muscular weakness and an exquisite sensitivity to touch over many areas of the body. In spite of the complaints of extreme poverty and inability to do anything at all, the claimant often smokes a popular brand of cigarettes and reports proudly on his sexual prowess.

The observant physician may note a surprisingly therapeutic effect from his interview and examination since many a claimant, after having told his story, is able to walk briskly to his car. This effect is noted most often if the departure from the office has been marked by a warm and moist handshake and an encouraging "I know you're going to do something for me, Doctor, and

God bless you!" Perceptive physicians in any field of medicine should be alert to the frank malingerer. Psychiatrists recognize this quality as an illness of a sort but in no sense is this a compensable condition. If recognized malingering ever became compensable, our medical insurance plans and possibly even our total economy would be seriously threatened.

Most physicians are personally warm and sympathetic, particularly to anxious and depressed patients, yet it is important in disability evaluations that physicians not be swayed emotionally in reaching their conclusions. The necessary professional quality of evaluations would be negated if the evaluating physician's opinion was influenced by a differing political philosophy or an overly sympathetic attitude and this could defeat the purpose of the consultative examinations.

Psychiatric Disabilities

The importance of the psychiatric disabilities under the Social Security Program, both numerically and economically, is shown by representative figures for 1962. Mental, psychoneurotic and personality disorders made up over 13% of the worker disability allowances and stood third behind circulatory diseases and diseases of the nervous system and sense organs (table 3). The primary diagnosis of schizophrenia stood second at 7%, ranking behind only arteriosclerotic heart disease at 17%. In the childhood disability allowances, the diagnostic group of mental, psychoneurotic and personality disorders was the most frequent with mental deficiency the overwhelming leader as a primary diagnosis. This particular category for psychiatric cases, "mental, psychoneurotic and personality disorders," is not really a suitable title since seldom are psychoneuroses or personality disorders allowed as causes of disability.

Table 3

WORKER DISABILITY ALLOWANCE 1962	
1. Circulatory and Heart	29%
2. Nervous System and Sense Organs	16%
3. MENTAL, PSYCHONEUROTIC AND PERSONALITY	13%
4. All Other Diagnostic Groups	43%
PRIMARY DIAGNOSES	
1. Arteriosclerotic Heart Disease, Coronary	17%
2. Schizophrenic Disorders	7%

Table 4

PSYCHIATRIC DISABILITIES 1962			
3,700 Allowances		Men 12.2%	Women 15.9%
IN FLORIDA, DECEMBER 1963			
Disabled Workers	31,500	$2,856,000	Per Month
Dependents	23,373	687,000	Per Month
Total	54,873	$3,543,000	

Psychiatric disabilities accounted for more than 37,000 allowances in 1962, representing 12.2% of the men found disabled and 15.9% of the women (table 4). Schizophrenic disorders were the leading cause of disability in workers under the age of 50, causing 34.4% of the disabilities allowed under age 35 and 16.1% of the disabilities between 35 and 49 years of age.

In Florida in December 1963 disabled workers drawing disability pay numbered 31,500 and represented $2,856,000 a month. The average payment is $90 a month and the range is from $40 to $240. Dependents of disabled workers, numbering some 23,373, drew compensation totaling $687,000 a month (table 4).

In June 1964 in Florida over 1,500 disability determinations were made by the State Office. Specialist consultative examinations were made on over 800 of this group and more than 1,000 special examinations were purchased (table 5). By decision of the State Office in Florida some 900 persons a month are determined to be disabled. On the average, about 60% of applicants are allowed and about 40% are denied. It is noteworthy that of those who are denied, at least 50% have in their records a statement from their own private physician that the claimant is totally and permanently disabled. The counselors and physicians making the disability evaluations at the state level understand why such statements are made by the claimant's personal physician but based upon consultative examinations and strict adherence to the law, their conclusions cannot always concur with these opinions. Objective evidence is required before a claimant is awarded disability. Alcoholics are usually denied unless there is significant end-organ damage. Epileptics are usually denied unless their seizures cannot be controlled. Mental deficiency is not enough if a man has worked productively as a mentally defective adult.

Table 5

June 1964—Florida

1,500 Disability Determinations	
900 a Month Found Disabled	60% Allowed
	40% Denied
Consultations on 800 People	1,000 Examinations
13% of the Allowed Are Psychiatric	
1,400 a Year x $90 Monthly Over $1,500,000 to Psychiatrically Disabled	

Some 13% of the disabilities allowed in Florida are psychiatric in nature (table 5). This will average 117 cases a month or over 1,400 cases a

year. With an average monthly payment of $90, this number means that over $1,500,000 a year goes to the psychiatrically disabled persons in Florida.

The headquarters of the Social Security Administration in Baltimore advises that 18.7% of the total purchased consultative examinations are in the field of psychiatry (table 6). On initial determination 14.3% of applicants have neuropsychiatric evaluation, 25% of the reconsiderations involve psychiatric consultations and 46% of those who are being evaluated for "continuing disability." The median cost of such evaluation is $25 with over 80% of the examinations falling between $20 and $30, 8% under $20 and 11% from $30 to $49.

Table 6

NATIONALLY

18.7% of Total Purchased Consultative Examinations Are Neuropsychiatric
On Initial Determination 14.3% Have Neuropsychiatric Evaluation
On Reconsiderations 25% Have Neuropsychiatric Evaluation
On Continuing Disability Evaluation 46% Have Neuropsychiatric Evaluation

Psychiatric disabilities are considered temporary or for review at the end of a year or perhaps again at two years. Ten per cent of the work load in a disability determination office is made up of cases of "continuing disability" up for review. The expected chronicity is shown by the fact that nationally nearly 50% of the cases considered for "cessation" or "continuing disability" are psychiatric. On the average it is found that 33% are continued and 15% are terminated. Electronic data processing has made it possible for the Social Security Administration to determine when anyone on disability pay goes back to work and deductions begin to come out of his salary. This case then comes up for a continuing disability evaluation and the recipient has a 12 month trial work period to demonstrate his regained earning capacity before his benefits are ceased.

The Veterans Administration, which awards disability compensation on a sliding scale based on the percentage of disability, has many persons on its rolls who are receiving compensation yet who are not totally disabled according to Social Security criteria. Retired senior officers of the services who are drawing disability pay are often denied by Social Security unless their current physical findings meet the criteria for total disability. It is not infrequent that the State Office will deny a claimant when a consultant has given an opinion that the person is disabled. It is rather rare, however, for the State Office to overrule a consultant and allow a claim unless the claimant is over 55 years of age, a heavy laborer by trade and in addition is illiterate.

About a third of the cases seen for disability determinations are referred on to Vocational Rehabilitation for possible restoration to gainful employment. No dollar limitation is placed on the amount Vocational Rehabilitation can invest in the salvage of a single case though budget restrictions realistically encourage the careful investment of funds toward rehabilitation of only the most likely candidates for restoration to gainful employment.

In a review of 48 cases seen last year for the Disability Determination Office in Florida it was found that the opinion of the consultant was sustained in 44 cases (table 7). One schizophrenic patient who could have worked in a sheltered environment was allowed because no such environment was available. Another patient not considered psychiatrically disabled was allowed on the basis of the internal medicine consultant's findings. Fourteen allowances were granted out of 16 claimants who were considered disabled on consultative examination. One mentally defective man was disallowed because he had worked gainfully as a mental defective and one alcoholic was disallowed as not being totally disabled. The important point is that these persons had all filed claims for their Social Security disability payments indicating that they felt themselves totally disabled. These claims had been endorsed by their private physicians to the extent of a diagnosis being given and often a statement that in their opinion the claimant was disabled. All these persons had had a Contact Report done by a claims representative from the District Social Security Office.

Table 7

FLORIDA

CONSULTANT PSYCHIATRIC OPINION	
Not Disabled	32
Disabled	16
Total	48

ACTION BY STATE OFFICE
Denied 29, Cessation 1
Allowed 2 (Schizophrenic 1, Internal Medicine Disability 1)
Allowed 14, Denied 2 (Mentally Defective 1, Alcoholic 1)
Agreed on 44

When the State Office reviewed the evidence, there was inadequate proof of the claim; hence, the Disability Determination Office turned to private consultants and purchased an examination from one or more specialists before reaching a decision. In this manner they were trying to operate within the meaning and the spirit of the law.

The psychopathology in this particular group of 48 claimants included most of the recognized forms of the neuroses, personality disorders, educational and motivational deficiencies, borderline psychoses and here and there a touch of gross exaggeration. The chronic dependency of the people as a group was marked with only a few admitting they could probably do some sort of work if they "had to." Passive dependency reactions are not compensable. It is the necessity and desire on the part of the personnel in the Disability Determination Office to operate within the law which makes the role of the psychiatric consultant so important. Is the claimant actually unable to follow any sort of gainful employment or does his overall dependency state only make him think he is unable? This is an important question that the consultant should keep in mind as he pursues his professional evaluation free of bias, pre-formed opinion or political skew. Observation and experience have led to the conclusion that not all psychotics are actually disabled for gainful employment and that in many instances it is more difficult to get the patient back to work than to get him reasonably well. Psychiatrists have to be aware not only of the professional or technical aspects of an illness, but also of social aspects when an alleged illness has become potentially compensable.

Recommendations

Two recommendations seem pertinent for the national administrators and their medical advisory committees to consider. First, money might be utilized for treatment of the psychiatrically ill claimant through Vocational Rehabilitation if no other treatment was available before any determination was made that a particular claimant was disabled. In this way a number of persons could probably be kept working gainfully yet be assisted through the provision of medication and psychiatric treatment which they could not otherwise afford. This would be an economy from the human standpoint as well as from the monetary angle. Second, persons who have been disabled and have drawn disability might well be restored to a level of health and employability by steps rather than facing cessation of continuation at full disability. Various degrees of illness in beginning the disability payments should not be recognized. Claimants should either be disabled or not disabled. Once a person has been on disability for a year and is up for re-evaluation, it would be economical to be able to return him to some type of work while continuing a 75%, 50% or even 25% disability rating. This would be a form of gradual restoration or "half way house" back to full employability and might encourage recipients to be once again self supporting. The fear these claimants face is real. As soon as they work and the Social Security deduction comes out, they know they will be tagged for review to see if they are still disabled or really able to be gainfully employed. Even though they have a 12 month trial work period, the threat of loss of the disability payments too often discourages any effort toward employment.

Psychiatrists must participate in this program seriously and unemotionally. Consultants for the Disability Determination Section of the Social Security Program should make reports objective and descriptive, including a good mental status evaluation and comment upon apparent intelligence, competency in handling funds, and prognosis with treatment. The more information provided the evaluation team, the more judicious will be the decisions. An additional point of great importance is the value of a careful examination and adequate records for the information of subsequent examiners in the future. The role this disability program plays in supporting the chronically diseased and disabled is important. Recipients have participated in at least token payment for benefits they seek. It preserves a semblance of human dignity not present in welfare programs while at the same time reducing the cost of such programs. When it is administered fairly, as it is, it merits the support of the medical profession.

References

1. Stephens, J. H., and Lerner, J.: A Review of 2,000 Psychiatric Consultations Purchased by the Social Security Administration, Am. J. Psychiat. 120:548-552 (Dec.) 1963.
2. Lerner, J.: Confidentiality of Psychiatric Reports Used in Evaluating Social Security Disability Claims, Am. J. Psychiat. 120:992-996 (April) 1964.
3. Lerner, J.: The Psychiatric Report in Support of a Claim for Social Security Disability Benefits. Social Security Administration pamphlet.
4. Lerner, J.: Disability Evaluation of Hallucinations in Psychiatric Illness, Am. J. Psychiat. 121:586-588 (Dec.) 1964.

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Medical Standards for Sport Scuba Diving

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The sport of scuba diving, just in its infancy, now embraces millions of persons. Because of the fascination and adventure inherent in this sport, not to mention commercial, research, and educational purposes, new enthusiasts are taking up the sport at an increasingly rapid rate. When done properly, this is one of the safest of sports; when done otherwise, the outcome is frequently fatal. Between January 1960 and August 1964, 55 scuba diving fatalities occurred in Florida. Since the first prerequisite for scuba diving is good health, this article is intended to acquaint physicians not personally familiar with scuba diving with acceptable medical standards for participation in this sport. By now just about everyone is familiar with the fact that S C U B A stands for self contained underwater breathing apparatus. It is not a well known fact, however, that scuba diving is strenuous exercise. Since it frequently involves heavy exertion in an aquatic environment that is sometimes hostile and dangerous, good health becomes absolutely mandatory. Before outlining the standards that should be used for prospective sport scuba divers, it should be noted that the would-be divers can be of great help by giving a full history which can be quickly scrutinized for important facts. It might take the following form:

Name
Age
Sex
Address
Telephone number
Height
Weight

If answers to the following questions require explanation, use the space labeled "Remarks," giving the number of the question.

1. Have you ever dived before?
2. Were any ill effects experienced?
3. Can you go to the bottom of a swimming pool without having discomfort in ears or sinuses?
4. Do you take part regularly in active sports? If so, which?
5. Have you ever been rejected for service or employment for medical reasons?
6. Have you ever been hospitalized? If so, for what?
7. When was your last physical examination? Month..... Year.....
8. When was your last chest x-ray? Month..... Year.....
9. Have you ever had an electrocardiogram?
10. Have you ever had an encephalogram (brain wave study)?

Check the blank if you have or ever have had any of the following:
Explain under "Remarks" giving dates and other pertinent information.

11. Hay fever or sinus trouble.....
12. Trouble breathing through nose (other than during colds).....
13. Discharge from ears, mastoid trouble, broken ear drum.....
14. As hma or shortness of breath after moderate exercise.....
15. Chest pain or persistent cough.....
16. Peptic ulcer, frequent upset stomach.....
17. Frequent diarrhea or blood in stool.....
18. Kidney or bladder disease.....
19. Syphilis or gonorrhea.....
20. Rheumatism or arthritis.....
21. Severe or frequent headaches.....
22. Dizzy spells, fainting spells, fits, epilepsy.....
23. Nervous breakdown.....
24. Dislike for closed-in spaces.....
25. Train, sea or air sickness.....
26. Alcoholism or any drug or narcotic habit.....
27. Jaundice or hepatitis.....
28. Anemia.....
29. Tuberculosis.....
30. Diabetes.....
31. Rheumatic fever.....
32. Any serious accident, injury or illness not mentioned above.....

Remarks

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The U. S. Navy imposes rigid medical standards for its divers. Sport divers, however, are not subject to the extreme hazards found in military situations; therefore, the standards need not be quite as rigid, albeit they should be almost as rigid. The following standards will assist the physician in determining the fitness of a diving candidate. Remember—not only will the diver's life be dependent upon this examination, but the lives of his companion divers as well. If a diver experiences difficulty underwater because of ill health, his companion diver is immediately placed in an extremely dangerous situation. The outcome could be fatal for both.

Age.—Provided there is a good standard of fitness, age should not debar the enthusiast. All candidates beyond the age of 40 should have an annual medical check-up to detect the onset of degenerative disease.

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WEIGHT.—The candidate should present no greater than 15% variation from standard age-height-weight tables. Fat absorbs about five times the volume of nitrogen as does lean tissue and because of the low circulatory rate of fatty tissue, the nitrogen is eliminated very slowly, thus acting to increase the incidence of bends.

EYES.—Vision correctable to 20/40 or better in the better eye should be required. Some marine life is dangerous; recognition and avoidance are extremely important. Persons with poor vision have been known to surface after a dive and have serious difficulty in finding their float or boat or even the shore.

TEETH.—Satisfactory bridges and dentures are acceptable if they do not interfere with effective gripping of the mouthpiece of the diving apparatus.

EARS.—It is absolutely essential that the external ear canals and the eustachian tubes be freely patent for the equalization of pressure changes. Nonpatency leads to severe pain, hemorrhage and, if perforation ensues, the inrush of cold water causes a severe vertigo which can be disastrous. Likewise, there should be no perforation, marked scarring and/or thickening of the eardrum.

Ear plugs not only do not offer a solution to these problems, but they are specifically contraindicated in scuba diving.

NOSE, THROAT, AND SINUSES.—There should be no obstruction to breathing or chronic hypertrophic or atrophic rhinitis. Septal deviation is not disqualifying provided there is adequate ventilation. There should be no signs of chronic sinusitis. Obstruction in any of these areas can lead to pain, hemorrhage and infection.

RESPIRATORY SYSTEM.—The lungs should be normal to physical and x-ray examination. A chest x-ray should be taken at full inspiration and full expiration. Chronic pulmonary conditions predispose to ruptured alveoli which can produce air embolism, the most serious of scuba diving accidents. Local bronchial obstruction, such as a pneumolith, can cause serious lung injury since it prevents rapid equalization of air pressure in some localized portion of the lung. Markedly enlarged hilar lymph nodes can cause obstruction which can lead to lung injury. A weakened area on the surface of the lung such as a bulla or bleb may rupture into the pleural space causing a spontaneous pneumothorax.

CARDIOVASCULAR SYSTEM.—There should be no significant abnormality. It is important to remember that scuba diving involves heavy exertion. The blood pressure should not exceed 145 mm. systolic or 90 mm. diastolic. There should be no varicose veins or hemorrhoids. There should be no anemia or bleeding tendency.

GASTROINTESTINAL SYSTEM.—No gastrointestinal disease should be present. In particular, there should be no peptic ulcer.

GENITOURINARY SYSTEM.—There should be no chronic or recurrent genitourinary disease. There should be no active or repeated venereal disease; the serology should be negative. The urinalysis should be normal and there should be no diabetes.

EXTREMITIES.—No gross defects should be present. Boats can be difficult to get into and shores can be rocky and slippery. The U. S. Navy Diving Manual states that the most common cause of scuba diving fatalities is drowning due to physical exhaustion from swimming after surfacing from a dive.

SKIN.—There should be no active acute or chronic diseases of the skin.

CENTRAL NERVOUS SYSTEM.—Attacks of unconsciousness are a contraindication; in an aquatic environment this is self explanatory. There should be no organic disease of the nervous system. There should be no epilepsy or history of head injury with serious sequelae. Neuropsychiatric disorders should not be present. Claustrophobia should disqualify the person.

TEMPERAMENT.—A high degree of intelligence should be present. There should be no alcoholism or drug addiction. Emotional immaturity or instability and recklessness are serious liabilities, not only for the person contemplating diving, but also for his companions. Anyone exhibiting these traits should be disqualified.

Summary

Scuba diving is a fascinating and extremely rapidly growing sport. The increased risks and hazards present in an aquatic environment make it absolutely mandatory that the scuba diver be in good health. Medical standards for the would-be sport scuba diver are outlined. If good health is combined with excellent swimming ability, proper training and then experience, scuba diving becomes not only one of the most fascinating of sports but also one of the safest of sports.

References are available from the author upon request.

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Heat Cramps Secondary to Skin Diving

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The hazards of skin diving are well known and have been well documented.[1,2] In medical discussions of skin diving, emphasis is justifiably placed on the barometric changes which occur under the water and the hazards which accompany those changes.[1] In his zeal to document such changes, however, the physician sometimes overlooks common garden causes of disease. The following case is an illustration of this point:

Report of Case

A 32 year old white man was seen in the emergency room of the hospital on Aug. 6, 1963, after a previous telephone call from his wife. The history, as given by her, was that he had been skin diving all day, that he was afraid he had the bends and that she was afraid he was dying.

On first examination in the emergency room, he was observed to be retching, hyperventilating and in moderately severe pain. The pain appeared to be in the abdominal muscles primarily and the thigh muscles secondarily, with involvement to a lesser degree in the arm muscles.

Dramamine 50 mg. was administered by hypodermic while the vital signs were being taken and a history obtained. The temperature was 98.8 F., the pulse rate was 80, respirations were 20 and the blood pressure was 106/66 mm. Hg. The patient gave a history of being in the water skin diving for seven and one-half hours. He went diving in the morning after having eaten no breakfast. During the day he worked extremely hard in 6 to 7 feet of water on creosote pilings with railroad jacks. All day he was under the water for about 15 minutes and alternately rested about 30 minutes on the top. During the day he ate a steak for lunch, but ate and drank nothing else. Because of the heat he said he perspired a great deal during the course of the day. He had lost 12 pounds by scale weight.

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While this history was being taken, a complete physical examination was being made. It revealed nothing abnormal except nausea, a florid face and severe muscle pain.

Electrolyte No. 2 solution was given by vein and warm bouillon by mouth. The nausea and muscle cramps stopped in about 30 minutes.

A diagnosis of heat cramps was made, secondary to loss of salt from perspiring inside the wet suit. The patient was sent home after two hours in the emergency room.

Summary

A case is presented in which the diagnosis was heat cramps secondary to skin diving.

References

1. Butterfield, D. E., and others: Hazards to Health: Skin Diving, New England J. Med. 269:147-149 (July 18) 1963; 269:255-259 (Aug. 1) 1963.
2. Duffner, G. L.: Medical Problems Involved in Underwater Compression and Decompression, Ciba Clinical Symposia 10-99, 14 July, August, 1958.

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An Assessment of Gastric Analysis

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One of the areas in which progress in internal medicine and gastroenterology has been most evident has been in the field of gastric analysis. The works of researchers in England and this country have resulted in the increased stature of this analytic technique.[1,6] Although no single approach to the assessment of gastric secretory function has evolved, it would seem that some degree of uniformity regarding technical performance and interpretation of results has been reached.[7]

Terminology

It would be helpful to clarify existing terminology before attempting further discussion. The most frequently utilized terms in gastric analysis are:

1. Milliequivalents per liter (mEq/L.)
2. pH
3. Free acid
4. Combined acid (total)
5. Anacidity
6. Achlorhydria

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1. Milliequivalents per liter (mEq/L.). —Synonymous with degrees or clinical units, and arrived at by determining the number of cubic centimeters of 0.1N NaOH required to neutralize (pH 7.0) 100 cc. of gastric juice and multiplying by 10 (for example, 5 cc. 0.1 NaOH neutralized 100 cc. gastric juice = 50 mEq/L.).

2. pH.—An expression relating to the concentration of H^+ ions in solution; an inverse relationship exists (that is, the greater the $[H^+]$ the lower the pH and the more acid solution); generally measured by using glass electrodes; pH 3.5 or less indicates the presence of free acid and activation of pepsinogen → pepsin.

3. Free Acid.—The amount of titratable acidity* present at pH 3.5 or less; total acid present ranging from pH 1.0 to pH 7.0.

4. Combined Acid.—The remainder of acid ions present titrated between pH 3.5 and pH 7.0. (Theoretically, includes acid ions titrated to pH 11.0.)

5. Anacidity.—Indicating the absence of free acid and the failure of the pH reading to drop more than one unit following histamine stimulation; pH usually stays at 7.0.

6. Achlorhydria.—The absence of free acid (that is, the failure of pH to drop below 3.5) but the ability of a stimulus to effect a drop in pH of more than one unit.

With these terms in mind, the following discussion on the usefulness of gastric analysis should be more understandable.

Technique

Gastric analysis is still being performed in a variety of ways utilizing a variety of stimuli.[3,6,7] The following method of performance is one which we and others have found most adaptable to clinical internal medicine and gastroenterology and are recommending for general adoption.

Procedure.—The patient fasts after midnight. He should not have bled from the upper gastrointestinal tract for five to seven days prior to the performance of the gastric analysis. The following morning a no. 18 Levin or Rehfuss tube is inserted 50 to 60 cm. into the stomach through the nose or mouth and the position of the tube tip is fluoroscopically placed in the most dependent portion of the stomach.** The tube should then be fixed in position by taping to the face. The patient may sit upright or lie on his left side. The fasting gastric contents are aspirated manually, the stomach emptied, and the tube connected to continuous suctioning (a small Stedman pump is usually employed) for two 30 minute periods, the subsequently aspirated contents being collected separately in a large burette and measured for total volume. Manual suction every 10 to 15 minutes may also be employed. Halfway through the basal hourly unstimulated collection period, 50 mg. of Benadryl are given intramuscularly. The hourly basal gastric contents are measured and removed from the burette.

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At the end of the basal collection period, 0.04 mg/kg body weight of histamine acid phosphate is given subcutaneously except in patients with a strong allergic history. Gastric juice is then continuously aspirated for one hour, divided into four 15 minute samples, following histamine stimulation, at the end of which period of time, the four collections are measured and volume recorded. Both half hourly basal collections and the four 15 minute posthistamine samples or fractions thereof are sent to the laboratory for analysis and pH readings are made for each specimen. A single total acid, in milliequivalents per liter, is recorded for each specimen using phenol red as an indicator. Results are calculated in the following manner:

> Each fraction of gastric juice analyzed will be returned with a pH reading and the number of milliequivalents per liter of "total" acid present. In that we are concerned more about total milliequivalents present, it is necessary to multiply the volume (in liters) of the original fractional aspirate by the number of milliequivalents reported by the laboratory. The following is an example:
>
> > Original sample collected: 100 cc. or 0.1 liter.
> >
> > Laboratory reports sample sent to contain 100 mEq/L. or degrees .: 0.1 liter (original volume) X 100 mEq/L. (gastric aspirate) = 10 mEq. total hydrochloric acid present in the originally aspirated sample of gastric juice.

This simple calculation is made for each of the two 30 minute basal collections and for each of

*Using a variety of indicators and 0.1N NaOH, we use phenol red which is titrated to an end point of pH 7.0, not separating free acid from total acid (an unimportant separation as we use pH recordings).

**Less depth of insertion will be necessary in a previously resected stomach. Fluoroscopic placement is essential. The tube tip will usually lie just to the left of the vertebral column (patient's left).

the four 15 minute posthistamine samples aspirated. The milliequivalents of hydrochloric acid present in the basal collections are added as are the milliequivalents present in the posthistamine aspirates and are subsequently referred to as the total milliequivalents of hydrochloric acid present in the hour basal collection and the hour posthistamine collection. The references to gastric analysis results are based on these two collection periods.

Clinical Application

The importance of utilizing such a standard analytic technique as that described becomes evident when the potentially wide clinical applicability of the results is examined. The following list presently comprises the clinical situations to which the results of gastric analysis might be applied:

1. The diagnosis or exclusion of duodenal ulcer disease.[8]
2. As a guide to selective gastric surgery for duodenal ulcer disease.[9]
3. Differentiation of benign from malignant gastric ulcer.[10]
4. The diagnosis of marginal ulcer (anastomotic ulcer).[8]
5. The recognition of the Zollinger-Ellison syndrome.[11]
6. The evaluation of megaloblastic anemias.[12]
7. The assessment of the completeness of surgical vagotomy.[13]

Before further consideration is given to each clinical circumstance to which the results of gastric analysis might be applied, a knowledge of normal values is essential. Ranges of normal basal and posthistamine hydrochloric acid output are seen to vary with the age and sex of the patient involved.[14] In general, normal people older than 30 secrete less acid basally and in response to a stimulus to gastric acid secretion.[14] Differences in sex affect results only minimally and insignificantly (table 1).

With these figures in mind, let us proceed then to consider the clinical applicability of gastric analysis performed as described in this paper.

Duodenal Ulcer Disease (Table 1).—X-ray negative dyspepsia in a patient who secretes greater than 10 mEq. of hydrochloric acid in a basal hourly collection and 45 mEq. or more in a posthistamine collection (hour) suggests the presence of duodenal ulcer disease. If the same patient puts out no free acid (that is, pH never less than 3.5) in a basal collection, he probably does not have duodenal ulcer disease. Although poststimulation results are less reliable because of considerable overlap, it is unlikely that a patient less than 30 years of age who secretes less than 15 mEq. one hour following histamine stimulation has a duodenal ulcer present. Approximately half of duodenal ulcer patients secrete acid in the normal range.[14]

Selective Gastric Surgery.—At present, most elective surgery performed for duodenal ulcer disease is not tailor-made for the patient. The surgeon performs the procedure he knows best and which might be dictated by certain findings or technical difficulties encountered at surgery. In essence, there are those who think that tailor-made surgery may be the answer to the reduction of some of the often bothersome as well as serious postoperative complications.[9,15,16] Only about 50% of patients with duodenal ulcer disease are hypersecretors (that is, secretors of acid levels well outside the range of the upper limits of normal: > 42-45 mEq/hr. after histamine); the remainder fall within the range of normal secretory output.[6,14] Knowing that a patient is a hypersecretor should dictate the need for removal of a good bit of parietal cell mass. A 75% resection without vagotomy should accomplish this end by reducing parietal cell mass. A patient with normal acid output who needs surgical intervention may get along well with an antrectomy or

Table 1.[7,14] — Results in Normals and Duodenal Ulcer
(Expressed in milliequivalents per hour)

	BASAL		POSTHISTAMINE (0.04 mg/kg)	
	NORMAL*(7)	ULCER†(14)	NORMAL*(7)	ULCER†(14)
All ages	0-6 (1.2)	0.1-17.9 (3.0)‡	0.1-25(8)	15-82 (37)‡
30	0-6 (2.9)**	0.7-9.9 (2.5)	8.8-25 (14)	23-56 (35)
30	0-3 (0.75)	0.1-17.9(3.0)	0.1-22.5 (7)	15-82 (37)

Parentheses denote mean values.
*Sexes combined—mean values for females usually 3 to 4 mEq/hr. less than for males.
**Females in this age group have slightly higher basal outputs.
†Calculation in milliequivalents per hour arrived at by multiplying the two highest successive 15 minute collections in milliequivalents ("peak rate") by two. (After Baron.[14])
‡Female outputs in basal collection averaged 1 to 2 mEq. lower than for males; after histamine stimulation, outputs averaged 10 mEq. lower than for males.

Table 2.[10]—Differentiation of Benign from Malignant Gastric Ulcers (After Fischermann)*

	Benign (236)	Malignant (109)	Per Cent Malignant
Anacidity (pH > 7)	0	20	100
Achlorhydric (pH 3.3 to 6.9)	4	40	91
Up to 20 mEq/hr.	156	45	22
More than 20 mEq/hr.	76	4	5

*Post-Histamine

hemigastrectomy combined with a Billroth I or II anastomosis and vagotomy. This same patient may also encounter no further complications if a simple vagotomy and emptying procedure (pyloroplasty or gastroenterostomy) are performed.[16]

Until the concept of selective gastric surgery gains a foothold in internists' and surgeons' thinking, it is doubtful whether gastric analysis will play a significant role in the area of gastric surgery.

Differentiation of Benign From Malignant Gastric Ulcer (Table 2).—A major consideration in dealing with ulcerations in the stomach is whether or not the ulcer is malignant. In addition to the radiographic approach, cytologic and endoscopic techniques as well as tetracycline fluorescent studies, results of gastric analysis are essential. If the patient is anacidic (pH 7), he has a malignant ulcer; if he is achlorhydric (pH 3.3 to 6.9), the chances are 90 out of 100 that it is malignant. If, on the other hand, he secretes greater than 20 mEq. of hydrochloric acid one hour after histamine stimulation, the chances of the ulcer being malignant are one in 20. Only 20% of patients with gastric cancer are anacidic, however.[10]

Marginal Ulcer Disease (Table 3).—When a patient who has undergone a partial gastric resection with duodenal or jejunal anastomosis for duodenal ulcer disease presents with postoperative abdominal pain or melena, the need to exclude marginal or anastomotic ulcer arises. Gastric analysis results may be the only way to diagnose the lesion. The combination of x-ray and endoscopic studies allows no greater than a 60% diagnostic accuracy.[17] An output of less than 15 mEq. of hydrochloric acid one hour after histamine stimulation makes a marginal ulcer unlikely. An output of 15 to 25 mEq. is probable for and of greater than 25 mEq. pathognomonic for the presence of marginal ulcer.[8]

Recognition of the Zollinger-Ellison Syndrome.—The association of pancreatic nonislet cell adenomata with gastric hypersecretion and the tendency to form recurrent, resistant, unusually placed, often multiple ulcers of the stomach and duodenum and rarely jejunum has been termed the Zollinger-Ellison syndrome. Steatorrhea, debilitating diarrhea and hypokalemia may also accompany the syndrome.[18] It may be one expression of multiple endocrine adenomata as well. In any event, a comparison of basal to posthistamine acid output, in milliequivalents per hour, may establish the diagnosis of the disorder. Normally, hourly basal to hourly posthistamine ratios of milliequivalent output are less than 45%,[19] and usually less than 20%. When there is a constant endogenous stimulus to the production of hydrochloric acid by the gastric parietal cell as is the case in the Zollinger-Ellison syndrome, the use of an exogenous stimulus such as histamine little effects any further increase over the basal hourly output, hence moving the "MAO ratio" toward 100%. When the patient's ratio is 45 to 60%, the presence of a powerful endogenous parietal cell stimulant should be suspected. When the ratio rises above 60%, its presence is almost certain.*[11]

Table 3.[8]—Studies on Acid Secretion Following Duodenal Ulcer Surgery

Status**	Acid Output (mEq/hr) Posthistamine
1. Subtotal resection, no marginal ulcer	12.5
2. Subtotal resection, jejunal ulcer	31.1
3. Gastroenterostomy, jejunal ulcer	43.5

*Acid output ranging from 15-25 mEq/hr. posthistamine was highly suggestive and 25 to 30 mEq/hr. pathognomonic for the presence of marginal (jejunal, anastomotic) ulcer.

The Evaluation of Megaloblastic Anemias.[12]—In that it becomes important to know whether or not the gastric mucosa is capable of secreting acid in evaluating the etiology of a macrocytic, megaloblastic anemia, the usefulness of augmented histamine gastric analysis (0.04 mg/kg. body weight doses of histamine acid phos-

*These patients almost always have greater than 20 mEq. of hydrochloric acid in a basal one hour collection.

phate) becomes apparent in this regard. Formerly, techniques of assessing gastric secretory potential utilizing carbohydrate meals, caffeine and then 0.01 mg/kg. histamine allowed as much as 10 to 40% error in the recognition of true achlorhydria.[20] Such has not been the case with the present technique of gastric analysis. When the pH value of gastric aspirates does not drop below 7 and certainly no more than 1 unit following histamine stimulation in a patient with a megaloblastic anemia, a state of anacidity exists and the diagnosis of pernicious anemia can be entertained. Other megaloblastic, macrocytic anemic states may obviously be associated with "histamine fast achlorhydria," but adult pernicious anemia should not be diagnosed except under the circumstance described.[12]

Evaluation of Vagotomy Completeness.—At the present time, the best way to evaluate the completeness of surgical vagotomy is through the use of the Hollander test.[21] This test utilizes the principle of employing a hypoglycemic stimulus (insulin) to initiate vagal stimulation and hence increased gastric acid secretion. It is time-consuming, demands reaching a state of hypoglycemia (< 50 mg.%) in the patient, and its results may be difficult to interpret. Recently it has been demonstrated that an adequate vagotomy (as assessed by the Hollander test) in patients with pyloroplasty or gastroenterostomy should be expected to reduce gastric secretion in response to maximal histamine dosage by 55 to 60%.[4,13] This naturally implies a knowledge of preoperative acid levels. Although not presently widely utilized for this purpose, one might expect that the future will witness a further extension of gastric analysis as a technique of evaluating vagotomy completeness.

Conclusion

It is hoped that this paper has accomplished two ends: (1) To acquaint physicians with recent advances in the field of gastric analysis and to familiarize them with a relatively simple recommended technique of performance. (2) To outline the many potential uses of the technique as it is presently performed.

Truly, anyone interested in the disease states which have been discussed cannot merely dismiss gastric analysis as just another diagnostic procedure. It is far from this. As one becomes more familiar with its technical aspects of performance and its broad potential clinical usefulness, gastric analysis will undoubtedly become a good friend of the better physican as well as the gastric surgeon.

References are available from the authors upon request.

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Combined Antibacterial Adsorbent Treatment of Simple Acute Diarrhea

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Most acute diarrhea treated today appears to have a viral etiology, and occurs most frequently in the household already stricken with a rash of acute upper respiratory infections. Diarrhea starts, so to speak, at the dinner table and goes through the entire house. Our modern pace of living, with our constant moving about and numerous daily interpersonal contacts, no doubt favors rapid dissemination of both respiratory and enteric viral infections.

Irrespective of the enteropathogenic organisms identified or suspected, acute diarrheal disorders need immediate treatment. The disturbance in intestinal motility and consequent malabsorption cause dehydration, profoundly affect the intracellular balance of sodium, potassium and chloride ions, and tend to become self-perpetuating. By the time the patient calls in a physician (usually this action is prompted by weakness and cramps), considerable fluid loss has occurred. The World Health Organization Committee on Enteric Infections recommends immediate management, consisting in order of importance of (1) rapid assessment and correction of the fluid and electrolyte deficit and (2) identification (where possible) and eradication of the causal agent.[1]

Many rational combinations of drugs have been proposed for the treatment of diarrhea, but none have seemed as reasonable as the formulation of agents known as Polymagma.* To combat

*Polymagma Suspension, Wyeth Laboratories, Philadelphia, Pa.

pathogenic bacterial flora (whether Escherichia coli, Pseudomonas species, the dysentery or coliform groups, Salmonella or Shigella), this preparation provides two wide spectrum antibacterial agents: dihydrostreptomycin and Polymyxin B. Dihydrostreptomycin is effective against most fecal bacteria, and those that are resistant to it are usually sensitive to Polymyxin B.[2,3] At usual therapeutic dosages, neither agent is absorbed from the intestine. To adsorb (and thus inactivate) enteroviruses and bacterial endotoxins, Polymagma furnishes an infusorial clay (activated attapulgite) known to have several times the adsorptive power of kaolin,[1,7] the standard earth used in many antidiarrheal preparations. In vitro studies have shown activated attapulgite (Claysorb) to adsorb the endotoxins of E. coli, Shigella sonnei,[4] and enteroviruses such as poliovirus types 1, 2 and 3, Echo-9 and Coxsackie B-3.[7] To increase the bactericidal action of dihydrostreptomycin[8] and to absorb water (thus aiding formation of solid stools), pectin has been added to the preparation. Alumina gel is utilized as the suspending agent; this substance is known to assist in adsorbing bacteria[9] and to soothe and protect the intestinal mucosa.

Polymagma has been reported effective in the emergency treatment of diarrhea in industrial workers[10] and in treating diarrheal enteritis in children.[11] Although the medication has been in wide use for several years, few formal reports of its efficacy have been made available. The present protocol will illustrate the clinical effectiveness of Polymagma against a variety of diarrheas treated in a private general practice.

Scope and Method

The study included 156 patients whose ages ranged from two to 86 years (mean, 38). Seven, all more that 75 years of age, were being cared for in nursing homes and 149 were ambulatory office patients. There were 90 females and 66 males. More than 90 per cent called the physician within the first 24 hours of the onset of diarrhea. By that time, the majority had passed many loose stools (mean, 10) and complained of weakness, abdominal cramps and fever. Typically, stools at first were soft, then later became watery.

Assignment of a specific cause for diarrhea was seldom practicable. Three patients had chronic ulcerative colitis. Eighty-five patients suspected of harboring pathogenic bacteria or other parasites were requested to bring in stools for examination. Enterobius vermicularis was found in the stools of one patient and Entamoeba histolytica in those of another, but all stool cultures proved negative for pathogenic bacteria. In one instance, diarrhea was thought to be related to dietary indiscretions, and in another to abuse of laxatives. In 149 cases no etiology could be predicated. Upper respiratory viral infections were, however, epidemic at the time of the study, and a majority of patients either had such infections, had just recovered from them, or were exposed to other persons who had them.

Thirty-nine patients had concurrent debilitating diseases. Arteriosclerotic heart disease or cardiac disease was present in 13; respiratory disease (asthma, emphysema) in three; peripheral vascular disease in one; diabetes in two; thrombocytopenia in one; arthritis in three; Addison's disease in one; poliomyelitis in one; kidney stones in one; hyperthyroidism in one; myxedema in one; leukemia in one; arrested tuberculosis in two; cirrhosis in one; gout in three; bronchitis in one; and ulcerative colitis in three. Other conditions diagnosed were lichen planus in one, urticaria in two, tonsillitis in one, anxiety neuroses in two, chickenpox in two, and peptic ulcer in four. In addition, two patients were pregnant and one had sustained a head injury.

Polymagma was administered in a dosage of 1 tablespoonful every hour for the first four doses, then 1 tablespoonful every three hours or with every loose bowel movement until diarrhea subsided. Children under 12 years of age usually received less medication, and the occasional adult initially received a larger dosage: 1 tablespoonful every one-half hour rather than every hour. Each tablespoonful (15 cc.) of Polymagma Suspension contains approximately 150 mg. dihydrostreptomycin base (as the sulfate), 60,000 units Polymyxin B sulfate, 1 Gm. activated attapulgite, and 135 mg. pectin in alumina gel.

Adult patients were instructed to refrain from food and liquids for the first six hours of treatment, then to start on simple warm liquids for the remainder of the first 24 hours. In one patient with severe cramps, 5 to 10 minims of paregoric was added to each tablespoonful of medication. For those who were apprehensive, 1/6 to 1/8 grain of sodium phenobarbital was given. Sixteen aged persons whose temperatures were elevated, usually to 102 F. or higher were treated concomitantly with broad spectrum antibiotics (tetracyclines). Leukocyte counts were taken as indicated

throughout the treatment period. The patient with E. vermicularis in his stools was administered a vermifuge, and the patient with E. histolytica received an amebicide.

Since most diarrhea is self-limited, the evaluation of therapy was based on promptness of response, objectified by the reduction in number of stools as time passed. If within 24 hours after the start of therapy there were three or less stools, the result was regarded as excellent. If it took more than 24 hours but not more than 48 hours to reduce the number of stools to three or less per day, the result was considered good. If it took more than 48 hours to accomplish the same result, or if there was no response to therapy, the result was poor.

Results

In most patients (139, or 89%) control of diarrhea was excellent, and in 14 additional patients (9%) there was good control. The only patients responding poorly were the three who had ulcerative colitis. Other conditions known to be present had little apparent bearing on the outcome.

Relief often was rapid; symptoms subsided in five patients after three to five doses. Diarrhea associated with the outbreak of upper respiratory infections and presumed to be of viral origin subsided rapidly with administration of Polymagma at the dosage level prescribed. The one diarrhea thought to result from dietary factors also responded readily, as did the diarrhea resulting from misuse of purgative drugs. The administration of tetracyclines had no apparent effect on the results of treatment; in these cases, diarrhea cleared just as promptly as it did when no antibiotics were given.

None of the patients had untoward reactions, and none had to discontinue therapy because of intolerance to the medication.

Discussion

In diarrhea associated with upper respiratory infections, as in the present series, the patient may or may not harbor pathogenic intestinal parasites. Usually no culpable bacteria can be isolated. A variety of enteroviruses have been identified, but none could be related to clinical illness or shown to act as accessories to bacteria in the production of enteric lesions.[1]

Epidemic diarrhea may often be traced to salmonellosis. This disease has been reported on the increase in the United States in recent years; possibly by our technical advances in agriculture, food technology and medical science we are driving the Salmonella organisms into the refuge of esoteric serotypes and into reservoirs of highly susceptible hosts.[12] In some regions, however, the incidence of salmonellosis fluctuates, making it difficult to detect an increase. For example, the Dade County (Florida) Department of Public Health identified 14 species of Salmonella in 1958, 17 in 1959, 41 in 1960, 15 in 1961, and 27 in 1962. For the same years the Department identified 52, 6, 7, 14, and 15 species of Shigella.[13] Probably subclinical salmonellosis occurs more widely than is currently recognized; its presence has been demonstrated by serum hemagglutination tests even in the absence of pathogens in the feces.[14]

Diarrhea in the present series was not due to Salmonella or other bacteria but presumably was viral in origin. When other types of infection are suspected or demonstrated, however, it usually is desirable to administer an antidiarrheal containing a wide spectrum antibiotic, in doses below the level at which systemic absorption occurs. Thus the antibiotic activity will be restricted to the site of the infection—the intestinal lumen.

Based on this study of an admittedly small number of patients, Polymagma appears to be effective in controlling the simple acute diarrhea so often encountered in general practice. The obvious exception to its usefulness is in chronic ulcerative colitis. Polymagma controlled all other diarrheas so rapidly and well that the only additional precautionary measure needed was having the patient drink plenty of liquids. In patients remaining ambulatory this is an important consideration, since other measures for restoring fiuids are unavailable.

Summary

An antidiarrheal preparation containing dihydrostreptomycin, Polymyxin B, activated attapulgite, pectin and alumina gel was administered to 156 patients who had simple acute diarrhea. In the great majority, diarrhea developed during or after an upper respiratoy infection. In only a few instances could the cause of the disorder be definitely ascertained; stools, except in two patients, were negative for pathogenic bacteria or protozoa. Nearly all patients responded rapidly to therapy; in 139 the number of stools was reduced to three or less per day within 24 hours. Only the three patients with ulcerative colitis did poorly. No side effects occurred. Diarrhea of the type so frequently treated in private practice responds well to such combined therapy.

References are available from the author upon request.

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Rupture of the Liver Associated with Toxemia of Pregnancy

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Rupture of the liver associated with toxemia of pregnancy occurs rarely, but is probably the gravest complication that can occur during pregnancy. Twenty-one cases have been recorded in the medical literature since Abercrombie[1] first described the entity in the London Medical Gazette in 1844. The last reported case was by Pavlic and Townsend.[2]

Report of Case

A 37 year old Negro woman, Para 2-0-1-2, was seen because of upper abdominal pain, nausea and shortness of breath. Her last normal period had occurred in December 1961, and she was due in early September 1962.

Her first antepartum visit to the Clinic was made the first week in April, at which time she was approximately five months pregnant and normotensive. She was not seen again until the first week of May, at which time her blood pressure was in the range of 190/110 mm. Hg and was associated with albuminuria and swelling of the lower extremities. She was placed on Rauwolfia serpentina (Raudixin), 100 mg. three times daily, and advised to report to the Polk County Hospital for more definitive care. She failed to keep this appointment.

On May 12, at 2 p.m., she suffered a sudden onset of acute incapacitating, upper abdominal pain, which radiated through to the back and was associated with nausea, weakness and some shortness of breath. She made an effort to meet the problem at home for one hour, taking several milk of magnesia tablets without relief. She then called her local physician, who saw her at home. She was doubled over with pain and unable to walk. She was given meperidine hydrochloride (Demerol) 100 mg. at this time. The diagnostic impression was possible coronary occlusion, or an acute biliary colic.

After approximately two hours, she was referred to the Polk County Hospital. On examination three hours after the onset of pain, the blood pressure was in the range of 240/150 mm. Hg, and the patient was in acute distress. Right upper quadrant pain and tenderness were present. The fundus of the uterus was a fingerbreadth above the umbilicus. No fetal heart tones were heard. She was given meperidine hydrochloride 100 mg., aminophylline 7½ grains, atropine 1/150 grain and reserpine (Serpasil) 2.5 mg. She was placed under an oxygen tent in semi-Fowler's position. The electrocardiogram was normal. Approximately four hours after admission, the blood pressure suddenly fell to 90/60 mm. Hg. She was placed in the Trendelenburg position and dextran was started intravenously. Examination revealed a soft abdomen. At this time, the fetal skull could be palpated readily and exhibited a "Ping-pong ball" sensation. The diagnosis of ruptured uterus was entertained.

Pelvic examination revealed the cervix to be 2 cm. dilated, admitting a finger; small parts were felt, and there was no bleeding. The patient was taken to the x-ray department for a flat plate of the abdomen. Before an exploratory operation could be performed, and while she was still on the x-ray table, the blood pressure was lost. In spite of transfusion by way of the femoral vein, she expired on the x-ray table.

On postmortem examination, the peritoneal cavity contained approximately 1,500 cc. of blood mixed with clots. The site of bleeding was a rupture in the capsule of the right lobe of the liver, the capsule having been elevated approximately 2 cm. by a massive hematoma. The uterus was intact. Microscopic sections of the liver showed periportal necrosis. Sections of the kidney revealed thickening of Bowman's capsule. The uterus displayed nothing remarkable other than a small fetus. The uteroplacental junction was intact.

Discussion

The occurrence of rupture of the liver in pregnancy is rare, this case representing the twenty-second reported to date in the medical literature. According to Rademaker[3] the chain of events is that of infarction, peripheral hypervascularization, vessel rupture, intrahepatic hemorrhage, tissue rupture, subcapsular hematoma, capsule perforation, hemoperitoneum, peritonitis and death. The role of toxemia is evident by a pre-existing liver lesion of toxemia. Common factors noted in cases reported are multiparity (only one primigravida), and an average age of 33 years in patients with toxemia of pregnancy; the right lobe of the liver is usually involved.

Treatment is successful only in those cases which are surgically explored. In the six cases with survival recorded in the literature, the preoperative diagnosis was rupture of the uterus, or abruptio placentae. If the diagnosis is suspected prior to demise, immediate exploration may well be life-saving. Digital pressure on the portal vein in the region of the foramen of Winslow controls the bleeding. The liver capsule may be sutured or hemostatic agents applied.

Summary

The presence of severe epigastric pain followed by shock in a patient with toxemia of pregnancy should make one suspicious of rupture of the liver. With respect to preventability, one can only say that those measures helpful in preventing hypertensive crises in such a patient should be vigorously initiated.

References

1. Abercrombie, J.: Case of Hemorrhage of the Liver, London, Medical Gazette 34:792, 1844.
2. Pavlic, R. S., and Townsend, D. E.: Spontaneous Rupture of the Liver in Pregnancy. Case Report. Am. J. Obst. & Gynec. 83:1373-1376 (May 15) 1962.
3. Rademaker, L.: Spontaneous Rupture of the Liver Complicating Pregnancy, Ann. Surg. 118:396-401 (Sept.) 1943.

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Clinicopathological Conference

University of Florida College of Medicine

D. R. Shanklin, M.D., Associate Professor of Pathology and Pediatrics
Melvin Greer, M.D., Associate Professor of Medicine (Neurology) and Chief, Division of Neurology.

A six year old white girl was admitted to the University of Florida Teaching Hospital three days prior to death with the chief complaint of paralysis.

Present Illness.—The patient had been in excellent health until three weeks prior to admission when she was exposed to measles and chickenpox. Sixteen days prior to admission she experienced headaches and vomiting, and lethargy then developed. Thirteen days prior to admission she had overt chickenpox. Nine days prior to admission she was unable to void, but was able to do so with the aid of warm water baths. Eight days prior to admission she was totally unable to void, had a wobbling gait, and was admitted elsewhere because of her urinary difficulty, staggering gait, and difficulty in the use of her legs. She was catheterized shortly after admission at her local hospital seven days prior to admission here and clear urine was removed. This was reported as free of albumin and sugar and microscopically negative with a pH of 6 and specific gravity of 1.015. There were periods of small unmeasured voidings, but repeated catheterizations were necessary when she complained of abdominal pain and her abdomen became distended. Some incontinence between catheterizations was noted.

No neurological findings were noted on physical examination at this time. There was no appreciable fever. The hemoglobin level was 14.6 Gm. per hundred cubic centimeters with a hematocrit value of 42 per cent, a white blood cell count of 9,800 and a differential count of 52 polymorphonuclear leukocytes, 46 small lymphocytes, 1 monocyte and 1 eosinophil. The blood sugar was 70 mg. and the blood urea 23 mg. per hundred cubic centimeters. Physical examination at that time revealed a profound lassitude and general weakness with a weak cry. No lesions of chickenpox were noted around the urethra and there was no objective evidence of tenderness in either costovertebral angle. Suprapubic palpation elicited slight tenderness and created a desire to void. The child had virtually no motor control of her lower extremities and exhibited bladder detrusor weakness and dysfunction, and the catheterizations became complicated by infection. She was placed on an indwelling catheter, and given bethanechol chloride (Urecholine) and sulfamethizole. There was a progressive ascent of the weakness to involve the arms, the left more so than the right. The spinal fluid was clear with no increase in pressure three days prior to admission here. On the day of admission, paralysis of the hands and shortness of breath with some involvement of the intercostal muscles were present. The patient was able to drink, but took solid foods poorly. The temperature was 39.7 C. (103.5 F.), and she was experiencing pain in the left side of the neck, headache, gastric distress, and superficial breathing.

Past History.—The child was the product of an otherwise uncomplicated seven months pregnancy, the first-born of twins with a birth weight of 2,000 Gm., the sibling weighing 1,850 Gm. There was respiratory difficulty for the first few days with subsequent recovery. The twins were discharged one month after birth. Their development subsequently was normal. The patient had an illness of the upper respiratory tract three weeks prior to admission and had received DPT and a polio booster shot six months prior to admission. Chickenpox was the only contagious disease she had contracted.

Family History.—The mother, aged 23, and the father, aged 25, were in good health. Another sibling, two years of age, has had recurrent staphylococcal infections. There was no family history

of tuberculosis, diabetes, congenital heart disease, or any form of kidney disorder.

Review of Systems.—The review of systems gave negative results other than for the present illness.

Physical Examination. — The temperature was 39.7 C. (103.5 F.), the pulse rate 110, respirations 14 and blood pressure 140/100 mm. Hg. The weight was 35 pounds. The patient was an anxious, obtunded white female child with obvious respiratory distress. The skin was pale and splotchy with periorbital cyanosis. Vesicles of varicella were no longer present. There were no abnormalities of the face, head, eyes, ears or nose. Papilledema was not seen. The teeth were in poor repair. There was no injection of the pharynx and the neck was supple. The patient was using the accessory muscles of respiration and the diaphragm intermittently with no intercostal breathing the major portion of the time. There was poor exchange of air at both lung bases and rales were heard in the right side of the chest. The heart sounds were of good quality with no murmur and a normal sinus rhythm. The abdomen was distended and tympanitic. The liver, spleen, and kidneys were not palpable. The bowel sounds were hyperactive. A catheter was in place in the urethra, with some erythema. There were no lesions around the anus. There was no cyanosis of the extremities. There were transitory and progressive neurological signs. The cranial nerves were intact except for weakness of the seventh and eleventh. Total examination revealed a complete quadriplegia with facial and sternoclavicular weakness. Deep pain was absent and no Babinski sign was noted. Sensory tracts from the trunk and legs and arms were intact.

Accessory Clinical Findings.—The total white blood cell count was 18,000, with a differential count of polymorphonuclear leukocytes 83 per cent and lymphocytes 13 per cent. There was a trace of protein but no sugar or acetone in the urine with 0-3 white blood cells per high power field in the urinary sediment and 1 plus bacilluria. The stool was formed and was negative for benzidine and guaiac. Ova and parasites were not found. Chest x-ray revealed an unremarkable heart, mediastinum, bony structures and a relatively clear lung field. Examination of the abdomen by x-ray revealed inspissated fecal material in the colon and some gas in the small bowel without distention. The retroperitoneal soft tissue structures were obscured by bowel material. The bony structures were not remarkable. The reaction to purified protein derivative, first strength, was negative.

Course in the Hospital.—A tracheostomy was performed on the day of admission because of the respiratory distress, and the signs remained stable throughout the evening. The blood pressure was around 100 mm. Hg systolic. Medications in water were retained well. Urinary output was good. The temperature was elevated and required aspirin for control. Sensation and motor function of the face and pharynx were intact. The patient adjusted well to the respirator and was able to breathe on her own for short periods of time. The day after admission the blood pressure decreased to about 80 mm. Hg systolic by palpation and the pulse stayed in the range of 85-90 beats per minute. The patient was still responsive with a good urinary output. Further sensory and motor loss could not be demonstrated. The temperature dropped slightly and in combination with the blood pressure changes prompted a more detailed neurological examination. This revealed the sensory level at C-2 with only facial sensation present. Gag reflexes were virtually absent. The facial weakness was prominent, but the extraocular movements were normal and full. The protein in the cerebrospinal fluid was 188 mg. per hundred cubic centimeters and 200 cells were found, 50 monocytes and 150 polymorphonuclear leukocytes. There was no growth on culture and the sugar was normal.

The day preceding death the paralysis increased to include partial mouth and eye activity with movement only after a great amount of coaxing. The face began to become edematous and saliva collection was noted. Mouth suction was a constant requirement. Anal incontinence was now present and the blood pressure fell to 65 mm. Hg by palpation. The pulse was unstable between 70 and 100 and at one time a heart rate of less than five per minute was noted with no palpable pulses. The level of awareness regressed. She was given intravenous fluids consisting of 1 Gm. per kilogram of urea, 3 per cent hypertonic saline and then solution F. An electrolyte study at this time showed a carbon dioxide combining power of 25 mEq. per liter, serum potassium 4.7 mEq. per liter, serum chloride 89 mEq. per liter and serum sodium 133 mEq. per liter. Vital signs suddenly ceased and treatment with intravenous adrenalin drip and Solu-Cortef, 100 mg. intravenously, gave no response.

Dr. Melvin Greer (Associate Professor of Medicine in Neurology):

Two weeks prior to her first admission this six year old child was exposed to measles and chickenpox. Six days later she experienced headache and vomiting, and then lethargy developed, following which typical varicella eruptions were noted over her body. On the day prior to admission some difficulty in voiding was noted, and the patient appeared to be ataxic when she walked. She was admitted the next day to a local hospital. The signs and symptoms at that time point to a diagnosis of encephalitis. The past history and family history seem noncontributory. I should like to ask Dr. Shanklin at this point whether the physicians there considered encephalitis?

Dr. D. R. Shanklin (Associate Professor of Pathology and Pediatrics):

Yes.

Dr. Greer:

Good. Because of continued difficulty in voiding she was catheterized intermittently. Episodes of incontinence were also noted. In addition, she was lethargic, cried ineffectually and exhibited little spontaneous motor activity, particularly of the lower extremities. She was afebrile on admission and routine hemogram, urinalysis, and x-rays were normal. A lumbar puncture was performed and the cerebrospinal fluid was normal. Because of progressive motor difficulty, ascending now to the upper extremities, the appearance of fever, difficulty in swallowing, pain in the neck and impaired respirations she was referred after one week to the University of Florida Teaching Hospital.

On her arrival here she was obtunded and exhibited labored respirations. She was mildly febrile. There was poor exchange of air in both lung bases and rales in the right side of the chest. The abdomen was distended and tympanitic. There was an indwelling catheter in the urethra. The remainder of the general medical examination was unremarkable. Neurological examination revealed weakness of all musculature of the face, trunk, and extremities. She responded by feeble movements and grunting sounds when she was stuck with a pin throughout. There was no papilledema, and no abnormal reflexes were obtainable. The tendon reflexes were not elicited.

Following a tracheostomy, the patient responded somewhat and reacted more. The blood pressure fell to 100 mm. Hg systolic, and the pulse rate to 90; however, she remained febrile and required artificial respiratory aid occasionally. With this slight improvement in her general condition, a detailed neurological examination confirmed the quadriparesis and facial weakness; however, it was evident that there was likewise a hypalgesia and a hypesthesia up to a level corresponding to C-2. A lumbar puncture revealed normal pressures, elevated protein, moderate numbers of inflammatory cells, normal sugar and no growth on culture. Routine hemogram, urinalysis, serum electrolytes, x-rays, and stool examination were still normal. The reaction to purified protein derivative was negative.

Despite supportive measures the condition of the patient deteriorated rapidly two days after admission and she manifested impairment of swallowing. Progressive weakness of muscles supplied by all cranial nerves became evident at the same time the vital signs deteriorated. Despite intravenous adrenalin and corticosteroids the patient expired on the third hospital day.

This sequence and extent of signs and symptoms all point to a diffuse, progressive involvement of the central nervous system with peripheral manifestations in this patient. The most likely diagnosis is postvaricella encephalomyelitis.

Postinfections or parainfectious encephalomyelitis is the most serious complication of the exanthematous diseases. Although it is more commonly seen with measles, its occurrence in varicella, smallpox, and rubella has occasionally been reported. The temporal relationship between the appearance of the rash and the onset of neurological dysfunction in this patient would leave no doubt that this is the problem. The ascending weakness, the associated sensory loss, and the obtunded state would suggest a diffuse process affecting the central as well as the peripheral nervous system. The cerebrospinal fluid findings of a high protein content and a pleocytosis are compatible with an inflammatory process accompanied by increased permeability of capillaries. This is a reflection of the widespread perivenous reaction, predominantly in white matter, followed by demyelination.

Since the agent responsible for the exanthematous rash has never been recoverable from the spinal fluid or nervous tissue from patients who suffer from the postinfectious encephalomyelitides, it has been presumed that the neurologic complications reflect an autoimmune response. This is also supported by the period of time which elapses between the appearance of the rash and the onset of neurologic symptoms. Whether the round cells

which surround venules are the harbingers of the antibodies which stimulate the demyelination, or are there in response to the breakdown of myelin is not known. Once initiated, the process continues at its own pace either in a diffuse manner or localized to one or another portion of the nervous system, such as brain, cord, or nerve roots.

The experimental prototype of this illness is experimental allergic encephalomyelitis. This disease, created in susceptible animals, is induced by the appropriate parenteral administration of homologous or heterologous nervous tissue suspended in an adjuvant to which tubercle bacilli are added. The autoimmume response here may be inhibited by a variety of drugs including corticosteroids and 6-mercaptopurine; however, once the disease is initiated, these drugs are of no value.

In human disease, gamma globulin and corticosteroid therapy have likewise been utilized, but there is no statistical evidence to indicate that these drugs alter the course of the disease. Except for such supportive measures as anticonvulsant therapy, treatment for secondary bacterial infection, and general maintenance of nutrition, there is no indication for the use of other measures in the acute stage.

The prognosis depends upon the severity of the illness as well as the specific exanthematous disease involved. The mortality in measles postencephalitis is highest (10 per cent) as is the general incidence of the disease (1:1000), as compared with the other exanthemata. The incidence of significant neurological residua is also highest in measles postencephalitis (30-40 per cent).

In summary, this child suffered from postvaricella encephalomyelitis. The disease progressed rapidly despite the use of supportive therapy and corticosteroids.

Clinical Diagnoses

Varicella
Postinfectious encephalomyelitis

Dr. Greer's Diagnoses

Varicella
Postinfectious encephalomyelitis

Dr. Shanklin:

The clinical diagnosis of postvaricella encephalomyelitis seems well founded from a study of the pathological materials. The spinal cord showed advanced demyelination and edema with distortion of the basic structure (fig. 1); perivascular

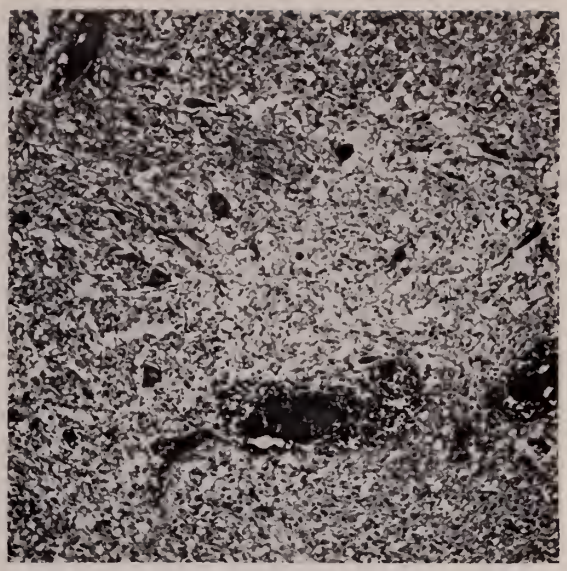

Fig. 1

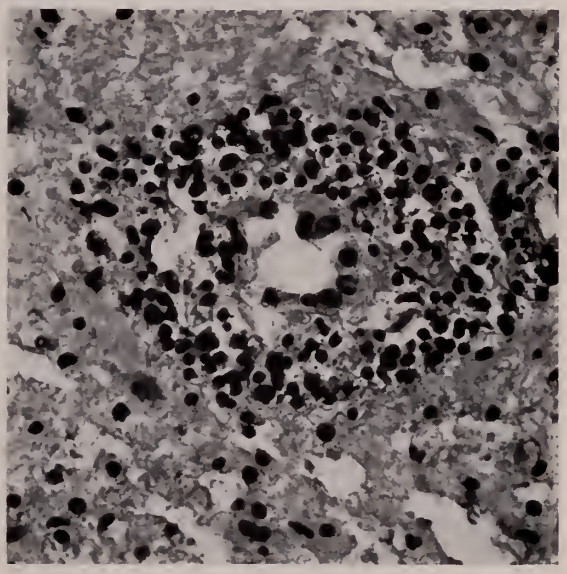

Fig. 2

cuffing in all areas of the central nervous system was prominent (fig. 2). Neuronal degeneration has followed and is often striking. Neuronophagia is not a part of the reaction in this case. These changes are shared by postrubella, postrubeola and postvaricella encephalomyelitis.

Because of the joint exposure to rubeola we have sought tissue evidence for a dual infection. What lymph nodes we had available were not reactive and failed to show any of the so-called giant cells of measles. The characteristic giant cells are, of course, seen only during the prodromal stage and during the first few days of

the exanthem, but healing stages can be expected. On the other hand, giant cell pneumonia of Hecht, often seen in severe measles, can be ruled out on study of the lung. This organ shows aspirated, inflamed debris from the tracheostomy and early lobular pneumonitis, but no measles lesions. A large number of megakaryocytes are seen in the lung capillaries, mute testimony to the severity of the illness. Dehydration is a part of the terminal event, as indicated by marantic platelet thrombi in the lung and elsewhere.

According to Brennemann, postvaricella encephalomyelitis is twice as common in males and more severe in males, but seen less often than that from measles. The usual onset is seven to 10 days after the eruption, but has been seen as early as three days. In general, the prognosis is better than for postmeasles encephalitis, in respect to coma, convulsions, and neuromuscular changes. Some 80 per cent have no residua; the fatality rate is about 5 per cent. From the severity of the tissue injury in this case, survival would have been impossible. We cannot explain the severity of disease in the female child in this case other than to speculate on the contribution of multiple gestation and prematurity with some lingering inadequacy of bodily defenses.

Anatomical Diagnoses

Postvaricella ascending myelitis with involvement of entire spinal cord and lower brain stem
Cerebral edema and focal demyelination
Status post tracheostomy
Aspiration pneumonitis, early
Multiple hemorrhages, adrenals
Pulmonary megakaryocytosis
Marantic platelet thrombosis, generalized
Fatty change, subcapsular region, liver

References

Appelbaum, E.; Rachelson, M. H., and Dolgopol, V. B.: Varicella Encephalitis, Am. J. Med. 15:223-230 (Aug.) 1953.
Enders, J. F.; McCarthy, K.; Mitus, A., and Cheatham, W. J.: Isolation of Measles Virus at Autopsy in Cases of Giant-Cell Pneumonia Without Rash, New England J. Med. 261:875-881 (Oct. 29) 1959.
Gibel, H.; Kramer, B., and Naji, A. F.: Encephalitis Complicating Chicken-Pox; Report of Case with Death Two and a Half Years Later, and Review of Literature, A.M.A. J. Dis. Child. 99:669-679 (May) 1960.
Heywood, P. M., and Richardson, J. C.: Sensory Neuropathy Following Chickenpox, Canad. M. A. J. 74:903-906 (June 1) 1956.
Holliday, P. B., Jr.: Pre-Eruptive Neurological Complications of the Common Contagious Diseases—Rubella, Rubeola, Roseola, and Varicella, J. Pediat. 36:185-198 (Feb.) 1950.
Nilsby, I.: Non-Bacterial Meningo-Encephalitides in Children with Special Reference to Spontaneous Post-Catarrhal and Varicella Meningo-Encephalitis, Acta Paediat. (Supp. 95) 43:1-152, 1954.
Pinkerton, H.; Smiley, W. L. ,and Anderson, W. A. D.: Giant Cell Pneumonia with Inclusions; a Lesion Common to Hecht's Disease, Distemper and Measles, Am. J. Path. 21:1-23 (Jan.) 1945.

President's Page

Medical Assistance for the Needy in Florida — July 1966?

The Social Security Amendments of 1965 (Public Law 89-97) establishes under Part 2 a new title XIX which provides grants to states to furnish medical assistance on behalf of families with dependent children, and the aged, blind, and permanently and totally disabled persons whose income and resources are insufficient to meet the cost of necessary medical care. Such medical assistance programs must include at least: (a) in-patient hospital services; (b) outpatient hospital services; (c) other laboratory and x-ray services; and (d) physicians' services wherever furnished. In order to be eligible for federal grants, the provisions of title XIX may be implemented by the state on Jan. 1, 1966 but not later than Jan. 1, 1970.

Under the provisions of the Social Security Amendments of 1965 and Florida Statutes 409.45 (Medical Assistance for the Needy) as amended in 1965 with attendant state funds authorized by the 1965 Florida legislature in appropriation item 937, the State of Florida, beginning July 1, 1966, will subscribe Voluntary Supplemental Insurance to pay physicians for medical, surgical, and diagnostic services, wherever rendered, to aged welfare recipients of monetary payments under the public assistance programs of Old Age Assistance, Aid to the Blind, Aid to the Permanently and Totally Disabled, and Aid to Families with Dependent Children.

Apparently the State of Florida intends to discontinue the Medical Assistance for the Aged Program on July 1, 1966, by a contingency in item 935 of the appropriations act (1965 Florida legislature). Beginning Jan. 1, 1970, however, the state must provide medical, hospital and nursing home services for welfare recipients and needy persons in the same categories (title XIX) in order to be eligible for federal grants under the provisions of the Social Security Amendments of 1965.

Subscribing medical insurance for the preidentified recipients of categorical welfare subsistence grants can be accomplished by appropriating $3 per month per recipient and paying the deductibles with state and federal matching funds.

Providing medical insurance for the same categories of needy persons unidentified prior to illness could not be accomplished by the state except through cooperative arrangement with the medical profession. Such an arrangement could be achieved by an agreement between the medical association and the state on a maximum lump sum appropriation to provide medical services through the Voluntary Supplemental Insurance carrier as fiscal agent. The state medical association could agree to prorate fees for services rendered if it appeared there was danger of exceeding the maximum appropriation. The sum of $1,500,000 authorized in item 935 of the 1965 Florida Appropriation Act for the fiscal year 1966-1967 could be used as the state appropriation with federal matching for such an agreement with the medical association. This would be the best way to gain accurate information to estimate the appropriation needed for the implementation of title XIX when such a program will be required.

Hospital services have been provided needy persons in Florida since 1955 through the Hospital Service for the Indigent state and county matching program (Florida Statute Chapter 401). There is a state appropriation of $994,000 for the fiscal year 1966-1967 and county matching funds of 50 cents per capita annually. If these county funds were deposited in a state trust fund, with the state appropriation, to provide hospital services to needy persons in all subdivisions of the state, they would be eligible for about 66% federal reimbursement for expenditures made for health services to those meeting the criteria of Chapter 409.45 Florida Statutes (Medical Assistance for the Needy) which would afford an appreciable saving in county ad valorem taxes. This program could be administered more efficiently through the insurance carrier that will be the fiscal agent for the Social Security hospital program.

It would be an unfortunate backward step for the state to discontinue medical assistance for the aged and needy at a time when, paradoxically, tax-supported health care will be extended to those not in financial need. Perhaps interpretation of item 935 of the Florida 1965 appropriations act and intent of Public Law 89-97 will require continuation of Medical Assistance for the Needy. The medical doctors of Florida and appropriate state agencies should not recess their efforts to insure adequate medical care for the *needy* sick.

H. Phillip Hampton

Psoriasis — The Great Simulator

Prepared by the Committee on Scientific Projects of the Florida Society of Dermatology.

Among common diseases of the skin, psoriasis is one of the most frequently "missed" diagnoses. This is explained by its remarkable array of atypical and isolated forms. Some of these features are illustrated by the following cases which demonstrate certain superficial and misleading resemblances to other common dermatoses.

(1) Psoriasis of the *scalp* shows discrete scaling patches, or diffuse involvement, from which the hair is not ordinarily shed. Seborrheic dermatitis is usually diffuse, scaling or crusted, and is accompanied by loss of hair, at least in male patients. Many, perhaps most, cases diagnosed as seborrheic dermatitis turn out to be psoriasis. Tinea capitis, a disease of children, shows broken-off hairs, microscopic evidence of fungi, and, usually, fluorescence under the Wood's light.

Fig. 1

(2) Psoriasis of the *nails* exhibits distal or lateral separation of the plate, discoloration, deformity and pitting. Fungus infections of the nails produce similar changes, except for pitting. Microscopic examination for fungi may be required to confirm the diagnosis.

Fig. 2

(3) Psoriasis of the *toes* (upper photo) is dry and scaling or moist and macerated. To distinguish it from dermatophytosis may require diligent search for fungi in scrapings. Pustular psoriasis of the soles (and palms) is a rare form of the disease (lower photo), with purulent lesions surprisingly devoid of bacteria or fungi.

Fig. 3

(4) Psoriasis of the *palms* must be differentiated from eczematous eruptions, fungus infections, neurodermatitis, and—yes—even syphilis. The sharply demarcated patches, with their thin, silvery scale, should prompt a search for lesions of psoriasis in the favored locations.

Fig. 4

(5) Psoriasis of the *face* may simulate lupus erythematosus when the "butterfly area" is affected. The general health is unimpaired and the scalp and ear canals are apt to be coincidentally occupied by lesions of psoriasis.

Fig. 5

(6) *Circinate patches* of psoriasis are often confused with fungus infection of the skin. Ringworm is identified by its scaling or vesicular border, whereas the border of psoriasis has a silvery scale which on removal causes characteristic bleeding points to appear.

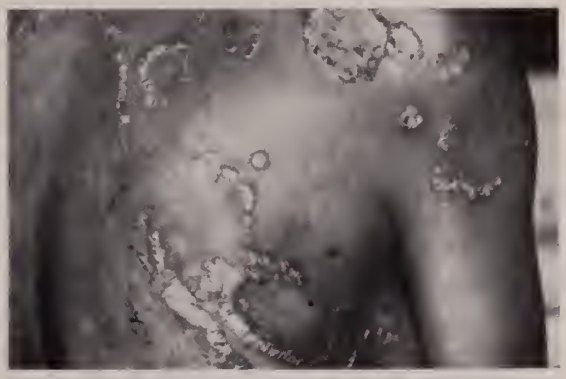

Fig. 6

(7) *Psoriatic arthritis,* associated with changes of psoriasis in the nails, is unique because of involvement initially of the terminal interphalangeal joints. Later developments make the articular changes clinically indistinguishable from those of rheumatoid arthritis. Absence of the rheumatoid factor, however, suggests that psoriatic arthritis is a separate and distinctive entity.

Fig. 7

Editorials

Gastric Analysis

The paper on gastric analysis in the present issue of The Journal of the Florida Medical Association by Drs. Rogers, Blum and Kalser is a much needed effort to reduce to ready clinical usefulness a technique which is performed by almost every physician at one time or another, and is probably less well understood than any other procedure. Because of the extremely confusing terminology involved, and the cavalier approach to techniques of collection and stimulation of gastric secretion, this test, as performed by most laboratories, affords little helpful information in the care of the patient. The report of Dr. Rogers and his associates offers an approach which is relatively reproducible, and a method of interpretation which affords help in evaluating the clinical status of the patient.

Particularly important in the teaching of interns and residents, and also for many students of gastroenterology, is the need for understanding some of the definitions and terminology involved in gastric analysis. All too often, interns and residents, when asked to define free and total acid, lapse into a halting discussion of either multiple types of acid or acid bound and unbound to protein. The first step to understanding this procedure is when one realizes that the phrase "Free acid is present" simply means that the pH of this patient's stomach is less than 3.5. "Total acid" represents how much 0.1N sodium hydroxide was required to bring the pH of the stomach to 7 or 7.6.

Another confusing aspect of gastric analysis is the varying use of terms such as milliequivalents per liter, clinical units, or degrees of acid. Again, as stated by Dr. Rogers and his group, there is no mystery here: these are synonymous terms.

More confusion arises with the use of various compounds for stimulating the flow of gastric juice. Some authors recommend the use of 0.04 milligrams per kilogram of histamine acid phosphate, others 0.04 milligrams per kilogram of histamine diphosphate, and some a similar dose of histamine base. Obviously, the total amount of histamine utilized varies considerably with these different techniques. At these levels of histamine, however, there seems to be little variation in response among preparations.

The physician should understand the hazards of histamine and instruct the ancillary personnel carefully if he is considering using an augmented histamine test for his patient. Most laboratory technicians, after reviewing the information accompanying a vial of histamine and discovering that the physician is ordering, in some cases, in excess of three times the amount recommended by the manufacturer, will communicate their concern to the doctor and, unfortunately, sometimes to the patient. When using these large amounts, it should be made clear both to the technician and to the patient what the usual adverse side effects of histamine are and that the use of diphenhydramine hydrochloride (Benadryl) in advance is designed to alleviate these effects.

There remains the problem of patients with moderate degrees of hypertension, a history of allergy or asthma, and recent hemorrhage from peptic ulcer. Patients with hypertension, in whom pheochromocytoma has not been excluded, should not receive the augmented histamine test. Although it would be an unusual physician who is not initially disturbed by the thought of giving 2.5 cc. of histamine acid phosphate to a patient with asthma, this dose of histamine has been shown to be perfectly safe for patients with asthma. As mentioned by the authors, the test should be delayed for 10 days to two weeks following a bleeding episode.

Betazole hydrochloride (Histalog) has been variously discussed as a substitute for histamine, but initially fell into disrepute because of failure of adequate response. Again the physician was inhibited by the manufacturer's suggested dosages. It has been shown in recent publications that doses of betazole hydrochloride from 1.5 to 1.7 milligrams per kilogram body weight are comparable, if not better, stimulants to gastric secretion than histamine. In addition, betazole hydrochloride has the advantage of marked reduction in the usual side effects and, therefore, does not re-

quire preliminary injections of diphenhydramine hydrochloride. It is probable that eventually this test will replace the augmented histamine stimulation test as a clinical tool.

Controversy as to methods of collection also arises in any discussion of gastric secretory determination. Gastric analysis is, at the best, a time-consuming and uncomfortable procedure requiring the cooperation of the patient and the close attention of a laboratory technician for at least two hours. The technique of initial hand aspiration of the stomach followed by continuous suction with a mechanical pump has much to recommend it in freeing the technician for other duties during this period of time. As was shown several years ago, however, by investigators using isotopes as indicators, any such mechanical device at its best recovers only about 50% of gastric acid. Constant turning of the patient from side to side and from supine to prone positions with hand aspiration during the entire period of collection yielded the best return, and even then only about 85% of the isotope could be recovered.

It is for this reason that many investigators have recommended the use of a different measurement for response to histamine, that is, the peak acid output or concentration of acid reached, rather than the total acid output during a collection period. In some reports this measurement has varied the least during repeated testing of the same subjects. As Drs. Rogers, Blum and Kalser have indicated, however, if performed with an adequate hour control prior to the injection of the histamine or betazole hydrochloride, the test, as reported, is clinically useful. Interpreted as they suggest, it may be extremely helpful as a guide for evaluating ulcer disease, both preoperatively and postoperatively, for the differential diagnosis of megaloblastic anemias, and in the selection of the type of gastric surgery for duodenal ulcer disease.

Drs. Rogers, Blum and Kalser are to be congratulated on their clear presentation of a needlessly complicated subject. The information contained in their paper should be part of the armamentarium of the practicing physician, whether general practitioner, surgeon, internist or gastroenterologist.

James L. Borland Jr., M.D.
Jacksonville

Medical Aspects of Diving

The two papers on diving appearing in The Journal this month are indeed timely. The beautiful, clear and temperate water of our lovely state attracts many diving enthusiasts. Unfortunately, the death rate for the participants has been alarmingly high.[1] Dr. Williamson's paper on "Medical Standards for Sport Scuba Diving" will be most helpful for the physician in offering advice to and treating the diving public. Members of the medical profession should be familiar with the physiology and physics of diving and be prepared to advise divers and care for the illnesses related to diving.

Dr. Balthrop's paper, "A Case of Heat Cramps Secondary to Skin Diving," suggests an interesting possibility. It does not state definitely whether the patient was diving with or without scuba or other breathing apparatus. Why such a diver would wear a wet suit for seven and one-half hours is difficult to understand. Whether or not he removed this suit while resting is not mentioned. As a rule the suits are rather difficult to change and considerable exertion is required in getting in and out of the usual suit. A wet suit is constructed of rubber or foam neoprene material and allows a small amount of water to enter the suit which is not able to circulate. The body heat of the diver warms the small amount of water and it acts as an insulating barrier against the cold water. I would assume that the patient was wearing this suit for protection. Anyone having worn a wet suit would understand the tremendous amount of discomfort such a diver as described would experience. It would not be possible for "bends" or decompression sickness to develop secondary to either free or scuba diving in the depth of water at which this man was working.

The medical profession should make known to the public the inherent dangers of this sport, especially for the neophyte, the inexperienced, the careless, and the physically unfit diver. Divers should be encouraged to have a physical examination as suggested by Dr. Williamson and advised not to participate unless they meet the requirements he has outlined.

I would like to suggest that a committee on sports be formed by the Florida Medical Association to provide advice pertaining to safety in water and other sports. The American Medical Association has such a committee.

Mr. Everett H. Williams Jr., Director of the

Bureau of Vital Statistics, Florida State Board of Health, has rendered yeoman's service in setting up a classification and coding of deaths due to skin and scuba diving in the state of Florida. This work has stimulated such a survey in many other states.

I hope more articles on this subject will be forthcoming in The Journal.

1. Taylor, G. D.; Williams, E. H. Jr., and Chappell, G. L.: Skin and Scuba Diving Fatalities, J. Florida M.A. 49:808-810 (April) 1963.

G. Dekle Taylor, M.D.
Jacksonville

The White Plague — End in Sight?

The gratifying decline in morbidity and mortality of tuberculosis over the past two decades can be attributed to concerted public health measures and to developments in the medical and surgical attacks on the disease. No one element is more important than the others although it should be recalled that the decline began with the introduction of modern public health measures, and long before chemotherapy was available. Now there is a general complacency concerning the disease which is still a formidable problem. Although only 19% of the population of the United States are tuberculin reactors, there are approximately 600,000 persons who are considered as special risks. These include persons with active disease, those with inactive disease for less than five years and contacts in newly reported cases.

Dissatisfaction with the slow decline in the number of new cases led the Surgeon General of the U. S. Public Health Service in 1963 to appoint a Task Force of physicians eminent in the field of tuberculosis to study the problem and to make recommendations for control. Pertinent parts of its recommendations which are embodied in legislation currently pending in the Congress are:

1. Increase appropriations by the federal government with grants to the states for:
   a. Services to unhospitalized active cases, to cases inactive for less than five years and to contacts in new active cases;
   b. Identification of high risks through tuberculin testing of children entering school, examination of reactors' associates and routine hospital admission roentgenograms in public hospitals serving cities of over 250,000;
   c. Continued examination of persons at risk and prophylactic treatment when indicated.
2. Establish at least six teaching fellowships in tuberculosis in medical schools, expand professional educational activities in tuberculosis, recruit and train persons for assignment to states to work in tuberculosis control.
3. Increase appropriations for research.

These recommendations have the endorsement, among others, of the American Thoracic Society through its Committee on Therapy, of the American College of Chest Physicians' Committee on Tuberculosis and of the National Tuberculosis Association.

Tuberculosis control has traditionally been under the aegis of local and state health departments. The current legislation, in my opinion, is not "another attempt of the federal government to take over." Rather it appears as a realistic and practical approach to a public health problem which is still present.

It seems that in all state legislatures, and ours is no exception, money is appropriated with greater dispatch for building roads, for enlarging governmental activities and for strengthening education (though not as easily as for building roads) than it is for matters pertaining to health. With the goal of completely eradicating tuberculosis before us, it is not unreasonable then to look elsewhere for financial assistance.

The eradication of tuberculosis will not be a crash program of the dramatic and successful sort applicable to acute infectious diseases. Rather it will be slow, undramatic and costly. It is costly and time-consuming to track down all contacts in an active case, to test them with tuberculin and to see that they are x-rayed at appropriate intervals. It is costly to do mass tuberculin testing, it is costly to hospitalize a person with tuberculosis. Parenthetically it should be noted that the highest incidence of active, undetected and thus hazardous cases is among the elderly, the medically indigent and the migrant workers. This should not lull one into complacency for the tubercle bacillus is no respecter of race, financial standing, age, occupation or sex.

Whether tuberculosis can be completely eradicated in the foreseeable future is debatable, but definite progress can be made with greater haste and efficiency in combating the White Plague if the recommendations of the Surgeon General's Task Force are carried out.

Max Michael Jr., M.D.
Jacksonville

LOMOTIL—*Pharmacologic Activity.*

The significant pharmacologic actions of Lomotil are summarized as follows:

Evidence indicates that Lomotil acts directly by inhibiting excess peristalsis.

Lomotil is not known to inhibit nonpropulsive intestinal movements.

Roentgenograms demonstrate that this activity occurs within two hours after oral administration and persists for at least six hours.

Studies in the rat show Lomotil to be more effective in inhibiting fecal excretion than either codeine or morphine.

Analgesic, anticholinergic, mydriatic and gastric secretory effects have not been significant.

Reduction of propulsive motility with Lomotil relieves spasm and cramping, allows physiologic absorption of fluid and reduces frequency of evacuations to provide prompt, symptomatic control of virtually all diarrheas.

LOMOTIL® tablets liquid

Each tablet and each 5 cc. of liquid contains:

diphenoxylate hydrochloride ..... 2.5 mg.
(Warning: May be habit forming)
atropine sulfate ..... 0.025 mg.

slows propulsion · relieves distress · stops diarrhea

Precautions: Lomotil is an exempt narcotic preparation of very low addictive potential: more than three million prescriptions have now been written for Lomotil. Recommended dosages should not be exceeded. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness and insomnia.

Dosage: For full therapeutic effect – Rx full therapeutic dosage. The recommended initial daily dosages, *given in divided doses,* until diarrhea is controlled, are:

Children:
3 to 6 months–3 mg. (½ tsp.* t.i.d.)
6 to 12 months–4 mg. (½ tsp. q.i.d.)
1 to 2 years–5 mg. (½ tsp. 5 times daily)
2 to 5 years–6 mg. (1 tsp. t.i.d.)
5 to 8 years–8 mg. (1 tsp. q.i.d.)
8 to 12 years–10 mg. (1 tsp. 5 times daily)

Adults: 20 mg. (2 tsp. 5 times daily or 2 tablets 4 times daily) **Based on 4 cc. per teaspoonful.*

Maintenance dosage may be as low as one fourth the therapeutic dose.

Lomotil is a brand of diphenoxylate hydrochloride with atropine sulfate; the subtherapeutic amount of atropine is added to discourage deliberate overdosage.

SEARLE *Research in the Service of Medicine*

Association News

Council on Specialty Medicine

Editor's note: The Council on Specialty Medicine requested that each specialty present for publication a short discussion of the reasons for its recognition as a specialty group and the functions of its members. The following articles appear in this series.

T.M.

Neurological Surgery

Neurological Surgery is a specialty consisting of the diagnosis and treatment of certain diseases of the nervous system, including trauma, as well as the surgical relief of certain aspects of diseases involving other systems. Evaluation for disability in the medicolegal sphere is also included.

Frequent and important duties of a neurological surgeon would include the diagnosis and management of craniocerebral and spinal injuries from both a conservative and operative aspect. This would include debridement of depressed fractures, removal of intracranial hematomas, and laminectomy in certain instances of spinal injuries.

One of the more common neurosurgical procedures is that of relief of pain and neurological deficit as the result of discal disease at various levels in the spine.

Diagnosis and surgical removal of intraspinal and intracranial space-occupying lesions is another major function of the neurological surgeon. This category includes neoplasms, abscesses, and spontaneous hematomas.

The neurosurgeon is also called upon to relieve intractable pain, by surgical methods, from metastatic carcinoma and other sources.

Certain specific neuralgias such as tic douloureux (fifth cranial nerve) and glossopharyngeal neuralgia (ninth cranial nerve), lend themselves to surgical therapy with generally excellent results when conservative management has failed.

Other rather wide vistas include surgery for certain diseases of the brain producing involuntary movements, cerebral vascular disease, and selected cases of focal epilepsy. The endocrine sphere has been entered with hypophysectomy for control of metastatic breast and other cancers, as well as diabetic retinopathy and Cushing's disease.

Surgery for diseases and injuries of the peripheral nerves, although not extremely frequent in civilian life, is still an important neurosurgical problem. Affections of the sympathetic nervous system such as causalgia, intractable vasospastic disorders, and occasionally severe hypertension, can be relieved by sympathectomy.

It might be of interest to review the requirements for the American Board certification in neurological surgery. A rotating internship and four calendar years of residency in approved teaching centers are required. Thirty months of this time is to be spent in clinical neurological surgery and the remainder of the time in the basic sciences, research, the animal laboratory, and other areas. After two years of practice and the completion of a satisfactory examination given by the American Board of Neurological Surgery, a certificate for life is awarded.

As of October 1962, there were 1,279 qualified neurological surgeons in the United States, its territories and possessions, including the military. Approximately 45 neurological surgeons were practicing in the state of Florida, as of May 1963.

The five national neurosurgical organizations include The Society of Neurological Surgeons, The Harvey Cushing Society, The Academy of Neurological Surgeons, The Congress of Neurological Surgeons, and The Neurosurgical Society of North America. In addition, there are a number of regional, state, and local organizations.

Outstanding progress has been made in this field during the past 50 years, both from a diagnostic and therapeutic point of view, but many serious problems still remain to be solved.

Committee on Neurosurgery

Pathology

Pathology, by definition, is the science of disease and the practice of laboratory medicine. A pathologist is a doctor of medicine, whose special field of activity is laboratory medicine and its role in patient care. The pathologist exists to aid his clinical colleagues by providing accurate and precise examinations and measurements on body tissues and fluids and to support his fellow physicians in the selection, accomplishment and interpretation of a wide range of laboratory studies that may contribute to diagnosis, management and prognosis.

A pathologist is a physician who has undergone the same basic training as his fellow physicians. He has proved his essential competence by achieving certification through examination by the American Board of Pathology, analogous to that of other specialty boards. The pathologist may elect to seek certification in Anatomic Pathology and/or Clinical Pathology. Special certification is available after appropriate training and experience in Clinical Chemistry, Clinical Microbiology, Hematology, Neuropathology and Forensic Pathology.

As a general practitioner of laboratory medicine, the pathologist strives to maintain basic competence and confidence in a wide range of endeavor: surgical and autopsy pathology, cytology, clinical chemistry, blood bank and transfusion services, serology, microbiology, hematology and diagnostic isotope work. In view of this gamut, it is not to be expected that the pathologist will be fully and equally competent in all of these fields, just as the modern specialist in internal medicine may not be fully and equally competent in cardiology, chest disorders, endocrinology, metabolism, and clinical hematology. The pathologist, however, by virtue of his laboratory environment and efficient allocation of time and energy is generally able to maintain a basic working knowledge in each major field of laboratory medicine and achieve special competence in one or more areas.

In surgical pathology, the pathologist determines the gross and microscopic characteristics of the specimen and establishes a tissue diagnosis. This is an objective record of one facet of the patient's total medical situation. Sometimes it is intrinsically and essentially the main diagnosis (for example, "Toe with arteriosclerotic gangrene" when derived from a diabetic patient). Sometimes the pathology record and diagnosis have legal value. They are frequently of importance in planning subsequent treatment, and in evaluation of previous therapy.

In autopsy pathology, the pathologist provides knowledge essential to the intellectual development of the individual physician and the entire medical staff. The clinician can make comparisons between his clinical diagnosis and the autopsy findings. He is thus able to evaluate his diagnosis and treatment of the individual case. The medical staff acquires general knowledge and shares in the intellectual gains of the individual physician.

Clinical pathology is a complex and varied field. Here the pathologist must understand its scientific, professional, and technical aspects. A working knowledge of administration, personnel management and public relations is required. It is his responsibility to provide optimal and efficient as well as economical clinical laboratory service. A specific test, measurement or examination is selected on the basis of sensitivity, specificity, accuracy, precision, economy, efficiency and practicality. Not only must such tests be individually selected and evaluated, but appropriate controls developed to insure that they are carried out with the greatest degree of accuracy and precision. Through the able support and assistance of qualified medical technologists, a vast number and variety of such examinations and measurements are made available to the physician at the bedside. Pathologists, however, must also be available to assist clinical colleagues in the selection, application and interpretation of such laboratory procedures. The development of quality control programs and the upgrading of medical technology have contributed immensely to the accuracy and precision of clinical laboratory measurements and examinations that in medical centers compare favorably with quality of research measurements and examinations.

A pathologist may have various patterns of practice; many practice in hospitals on a part or full time basis. The relationships of pathologists to hospitals are usually by contract, such as fee for service, and not direct employment. Many pathologists devote part or all of their time to private office pathology, with referrals from clinicians. The pathologist may be especially interested in blood banking, public health or research.

The pathologist is in a unique position to bridge the gap between the basic sciences and clinical medicine. He must be able to communicate freely and effectively with his clinical colleagues as well as basic scientists. From the latter, he must be able to select appropriate measurements and examinations that can contribute to patient care and from his clinical brethren he receives a stimulus and often the impetus to extend the scientific foundation of medicine to the patient's benefit.

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Hospital Salvador Paredes, Trujillo, Honduras.

Subcommittee on Inter-American Relations

Dedication in Honduras—Shall We Return?

We recall General MacArthur's solemn declaration and promise when he was ordered out of the Philippines, "I shall return." It was a statement which gave hope to the Filipinos when all seemed lost. And return he did.

Recently and almost symbolically on July 4 several members of the Florida Medical Association attended the dedication of the Hospital Salvador Paredes, in Trujillo, Honduras. This hospital is of significant interest to our Association because its reactivation was inspired by members of the Florida Medical Association and in particular by members of the Subcommittee on Inter-American Relations under the able, dedicated, energetic chairmanship of Dr. John J. Fisher, of Jacksonville.

Dr. Fisher, an altruistic gentleman if there ever was one, has apparently set as one of his aims in life, aiding peoples who need medical help and medical facilities—the have-nots—as far as medical care is concerned. He needed to look no farther than our Central American neighbors for such an area of great and desperate need. Honduras is an incredibly poor country with areas completely inaccessible by land because of its mountainous terrain. Trujillo, a small town on the eastern half of Honduras' northern coast, is eight hours by boat from the nearest medical aid. Dr. Fisher and members of his Committee persuaded the Honduran government to make this 50 bed hospital in Trujillo available and we promised that to the best of our ability we would attempt to provide volunteer medical doctors and other medical personnel for this hospital in order to give desperately needed medical care.

The hospital is now a physical fact. It is there. A beginning has been made in staffing the hospital. Dr. Gordon Allison of Clewiston was the first volunteer. His experience has been frustrating because of lack of medical and surgical supplies and medical aides. At the hospital dedication on July 4 attended by the Minister of Health of Honduras, the American Consul of the area, the director of hospitals of Honduras and other VIP's, Drs. Fisher and Allison in plain language informed the officials of Honduras and the leaders of the town what was expected on their part. They seemed most eager and willing to help, but substantial aid cannot be expected until the first of the year when budgetary allowances are provided by this economically depressed country.

In the meantime the people of Trujillo and surrounding area need medical care. The hospital is there and it is a fine little hospital. They need doctors and medical supplies, equipment and drugs. I personally feel that this should be the favored and number one project of our Florida doctors. It is far better to concentrate charity close to home than ineffectively scatter it far and wide. Our Central American amigos need our help. Let us justify the sacrifices, time and energies of our thoroughly and sincerely dedicated Committee and effectively help our Honduran neighbors by responding with personal service until the project can be on its own.

George S. Palmer, M.D.
Tallahassee

Deaths

Carter, Donald Dean, St. Petersburg; born in Erwin, Tenn., in 1925; Duke University School of Medicine, Durham, N. C., 1948; served an internship, a residency and a one year fellowship in gastroenterology at Duke University; participated in clinical research at McGill University, Montreal, Canada, in 1950-1951; came to St. Petersburg 10 years ago from Durham, where he was on the medical staff of Duke University and the Veterans Administration hospitals; was gastroenterologist at the St. Petersburg Medical Clinic; was a member of the American Medical Association, Southern Medical Association, American Society of Internal Medicine, Florida Society of Internal Medicine, a fellow of the American Gastroenterological Society, and an associate member of the American College of Physicians; died June 29, aged 39.

Erwin, Robert Stanley, Gainesville; born in Nashville, Tenn., in 1885; University of Nashville Medical Department, 1905; University of Tennessee College of Medicine, Memphis, 1927; practiced internal medicine in Embreeville, Tenn., for two years before locating in Jacksonville, where he practiced for 51 years, retiring in 1957; was a veteran of World War I, serving in the Army Medical Corps with the rank of lieutenant colonel; held membership in the American Medical Association, Florida Society of Internal Medicine and American Society of Internal Medicine and was a life member of the American College of Physicians; died July 3, aged 79.

Gachet, Fred Smith, Jr., Lakeland; born in Clio, Ala., Jan. 29, 1898; John Hopkins University School of Medicine, Baltimore, 1928; interned at New Haven Hospital, New Haven, Conn., and served residencies at Strong Memorial Hospital and Rochester Municipal Hospital, Rochester, N.Y., from 1928 to 1931; was instructor of pediatrics for nine years at the University of Rochester School of Medicine and Dentistry; entered the practice of pediatrics in Lakeland in 1939; served for four years during World War II with the Army Medical Corps, attaining the rank of lieutenant colonel; was a diplomate of the American Board of Pediatrics and a member of the American Medical Association, American Academy of Pediatrics, Florida Pediatric Society and Johns Hopkins Medical Association; died June 1 while vacationing in Barbour County, Alabama, aged 67.

Hay, Isaac Morris, Melbourne; born in Somonauk, Ill., Aug. 19, 1899, Northwestern University Medical School, Chicago, Ill., 1923; interned at Cook County Hospital, Chicago; entered the practice of medicine and general surgery in St. Augustine in 1924, but since 1928 had practiced in Melbourne; was a veteran of both World Wars, terminating his military service in 1946 with the rank of lieutenant colonel; was a former secretary, vice president and president of the Florida East Coast Medical Association; was a member of the American Medical Association, American Academy of General Practice and Florida Association of Railroad Surgeons and was formerly a member of the Southeastern Surgical Congress; established the first hospital in Brevard County; died May 31; aged 65.

Hogg, Bruce MacLean, Coconut Grove; born 1904; Columbia University College of Physicians and Surgeons, New York City, 1933; long associated with the Presbyterian Hospital, New York City; had engaged in the practice of general surgery in the Miami area since 1951; was certified by the American Board of Surgery; held membership in the American College of Surgeons, American Medical Association and American Thoracic Society; died June 2, aged 61.

Wolk, Harry Edward, Miami Beach; born in New York City, Nov. 2, 1905; University of Berlin, Germany, 1933; served an internship and residencies at Cleveland City Hospital, Cleveland, Ohio, and in Vienna, Austria, and Szombathey, Hungary; practiced in Cleveland until he came to Miami Beach 14 years ago; was certified by the American Board of Obstetrics and Gynecology and held membership in the American Society of Abdominal Surgeons, American Medical Association, Southern Medical Association, American College of Obstetricians and Gynecologists and American College of Abdominal Surgery; died June 11, aged 59.

News

The University of Miami School of Medicine announces a postgraduate seminar on "Allergic and Immune Disorders of the Respiratory Tract" to be held January 28-30, 1966, in Miami. Details and registration information may be obtained by writing Postgraduate Seminar, Department of Medicine, University of Miami School of Medicine, Jackson Memorial Hospital, Miami 33136.

The latest clinical and research information on Hodgkin's Disease will be presented in a symposium, co-sponsored by the American Cancer Society and the National Cancer Institute, to be held November 22 at the New York Hilton Hotel, New York City. Interested physicians, medical students and investigators are invited to attend. There will be no advance registration or registration fee. Further details may be obtained by writing Jack W. Milder, M.D., Research Department, American Cancer Society, Inc., 219 East 42nd Street, New York, N. Y. 10017.

Variety Children's Hospital of Miami will present its annual pediatric postgraduate course entitled "Gastrointestinal Disorders in Children" March 9-12, 1966, at the Deauville Hotel, Miami Beach. A faculty of nationally known medical authorities has been assembled. Complete information may be secured by writing Donald H. Altman, M.D., program chairman, Variety Children's Hospital, 6125 S.W. 31st Street, Miami 33155.

Florida members of the Flying Physicians Association have recently organized their own chapter and are applying for a state charter. Flying Physicians Association is a national organization of physician pilots who participate in the development of air safety programs with the government, emergency mobilization and disaster programs for civil defense, supplementing the Red Cross and Civil Air Patrol. There are more than 1600 members and their primary aim is the promotion of safety education and pilot proficiency. They are striving to increase their enrollment and you can help by contacting the president of the Florida chapter, Carl Fromhagen, M.D., Clearwater, Florida who will forward information and application forms.

A postgraduate course entitled "Unresolved Problems in Cardiology" will be held Jan. 20-22, 1966 at the Mount Sinai Hospital, Miami. This is the regional meeting of the American College of Cardiology, cosponsored by Mount Sinai Hospital and the University of Miami School of Medicine.

The 38th Scientific Sessions of the American Heart Association have been scheduled for October 17-19 at the Americana Hotel, Bal Harbour, Miami Beach.

The Florida Division, American Society of Medical Technologists, and the Florida Society of Pathologists will hold their annual joint meeting at the Americana Hotel, Bal Harbour, October 28-31. Dr. S. Raymond Gambino, Englewood, N. J., will present workshops on blood pH and gases and will lecture on serum bilirubin. Dr. John B. Miale, Miami, will conduct a workshop on blood coagulation.

Physician Placement Service

The Association's Physician Placement Service, a division of the Executive Office, operates under the policy direction of the Committee on Physician Placement. It cooperates actively in exchanging information with the American Medical Association's placement service, which serves as a clearinghouse for the state services. Physicians may list opportunities and openings or register themselves for placement assistance. Communities also are aided in obtaining additional medical personnel. The Placement Service's prime publication is the FLORIDA PHYSICIAN LOCATIONS BULLETIN, which is mailed regularly to physicians utilizing the Service. It contains current information on medical opportunities throughout the state in each of the specialties as well as in general practice. As of June 15, some 150 physicians were registered with the Service. Approximately the same number of opportunities were listed. About one third of the openings were in general practice, while general practitioners accounted for less than one fourth of the physicians registered. Practice opportunities were distributed fairly evenly in most sections of the state.

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WANTED: General Practitioner for northwest Florida community. Office space available in 32 bed hospital. Write P.O. Box 397, Jay, Florida.

EXCELLENT OPPORTUNITY for General Practitioner in community of 15,000; central Florida; 76 bed JCAH Hospital. Write or call collect R. C. Thompson, Bartow Memorial Hospital, Bartow, Fla.

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Specialists

WANTED: Pediatrician, ENT, Internist and Dermatologist for new medical building ready Feb. 15. Adjacent to hospital in beautiful location on Gulf of Mexico. Fine practice opportunity. Write C-510, P.O. Box 2411, Jacksonville, Fla. 32203

OBSTETRICIAN - GYNECOLOGIST WANTED: To associate with two man group. Large established practice in Miami; Board eligible or certified; prefer under age 35. Write P.O. Box 384, Miami Shores, Fla.

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INTERNIST: Board eligible or certified. Florida license. Practice with six man group in Southeast Florida community. Younger man preferred. $18,000. salary guaranteed or percentage arrangement whichever is greater. Possible partnership in two or three years. Write C-656, P.O. Box 2411, Jacksonville, Fla. 32203.

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Miscellaneous

OCCUPATIONAL HEALTH: Large company desires general practitioner or internist for plant in Pensacola area. Experience in industry desirable but not essential. Florida license required. Attractive opportunity. State qualifications. Write C-654, P.O. Box 2411, Jacksonville, Fla. 32203.

PART-TIME DIRECTOR OF MEDICAL EDUCATION: 350 bed hospital. Address curriculum vitae and inquiries to Administrator, Baptist Hospital, Miami, Florida.

PHYSICIAN WANTED: Immediate opening for Florida Licensed physician in the Outpatient Department, Hillsborough County Hospital, 5906 - 30th St., Tampa, Fla. Approximately 40 hours week. Contact Dr. J. H. Moseley, Director, Outpatient Department.

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POSITION WANTED: Medical secretary, nine years experience. One year nursing, have supervised hospital steno pool. Desire permanent move to coastal or inland lake area. Salary requirement $400. plus. Write C-657, P.O. Box 2411, Jacksonville, Fla. 32203.

GENERAL PRACTITIONER desires relocation in Southeast Coast. Would like to share office with established surgeon or specialist on a rental basis. Write C-579, P.O. Box 2411, Jacksonville, Fla. 32203.

ESTABLISHED BOARD CERTIFIED GENERAL SURGEON in large Florida city desires association in smaller community. Write C-652, P.O. Box 2411, Jacksonville, Fla. 32203.

G. P. AVAILABLE July 1966. 1965 University of Florida graduate seeks association with established G.P. or group in small city. Age 31. Family, military obligation completed. Attending October G.P. convention in Clearwater. Walter Lane, M.D., 4812 Court I Ensley, Birmingham, Ala.

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LOCUM TENENS: Available to do general practice after Oct. 1 for approximately 6 months. Age 36. General Practitioner for past 5 years. Write C-658. P.O. Box 2411, Jacksonville, Fla. 32203.

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MEDICAL SUITES FOR LEASE. Missouri Medical Center, Clearwater, Florida. Ample parking, centrally located. Floor plan to specification of tenants in new addition. Contact Fred J. Owens, 422 Harbor View Lane, Largo, Florida. Telephone 581-2565.

OFFICE SPACE AVAILABLE on a part-time basis, Kane Concourse, Miami Beach, Florida. An Internist or General Practitioner would be preferred. Phone 865-7177.

FOR SALE: S. central Florida. 6,500 acre ranch, home, barn, 2,000 acres in improved pasture—can be divided, priced reasonably. 90 acres has 57 acres in income producing grove, home $150,000 on terms. Jarrett Hamilton Realty, Box 1007, Arcadia, Fla. WA 9-5571.

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FOR RENT: Medical suite in medical building, Vero Beach, Florida. Write Thomas Wells, M.D., 159 South Halifax Avenue, Daytona Beach, Florida.

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Books Received

Comparative Biochemistry of Arginine and Derivatives. Ciba Foundation Study Group No. 19. Edited by G. E. W. Wolstenholme, O.B.E., M.A., M.B., F.R.C.P., and Margaret P. Cameron, M.A. Pp. 103. Illus. 11. Price $2.95. Boston, Little, Brown and Company, 1965.

Cardiomyopathies. Ciba Foundation Symposium. Edited by G. E. W. Wolstenholme, O.B.E., M.A., M.B., F.R.C.P., and Maeve O'Connor, B.A. Pp. 428. Illus. 136. Price $12.50. Boston, Little, Brown and Company, 1964.

Tracy's The Doctor As A Witness. By William J. Curran, LL.M., S.M. Hyg. Ed. 2. Pp. 196. Price $5.75. Philadelphia, W. B. Saunders Company, 1965.

Early History of The Ochsner Medical Center. The First Twenty-Two Years. By Guy A. Caldwell, M.D. Pp. 115. Illustrated. Price $4.75. Springfield, Ill., Charles C. Thomas, Publisher, 1965.

Rheumatic Fever. Diagnosis, Management and Prevention. By Milton Markowitz, A.B., M.D., and Ann Gayler Kuttner, B.S., Ph.D., M.D. With a special chapter on Community Health Services by Leon Gordis, A.B., M.D. Volume II in the series Major Problems in Clinical Pediatrics, Alexander J. Schaffer, Consulting Editor. Pp. 242. Illustrated. Price $7.50. Philadelphia, W. B. Saunders Company, 1965.

Hallux Valgus, Allied Deformities of the Forefoot and Metatarsalgia. By H. Kelikian, M.D. Pp. 503. Illustrated. Price $19.50. Philadelphia, W. B. Saunders Company, 1965.

Fracture Problems. Problem Cases From Fracture Grand Rounds at the Massachusetts General Hospital. By William Hamilton Harris, M.D., William Norman Jones, M.D., and Otto E. Aufranc, M.D. Pp. 371. Illus. 199. Price $20.00. St. Louis, The C. V. Mosby Company, 1965.

Surgery of the Biliary Passages and the Pancreas. By Walter Hess, Privatdozent Dr. med., Zurich, Dozent of Surgery, Faculty of Medicine, University of Basle, Switzerland. Translated from the German by Heinrich Lamm, Dr. med., F.A.C.S. Pp. 638. Illustrated. Price $25.00. Princeton, N. J., D. Van Nostrand Company, Inc., 1965.

Synopsis of Cardiology. By William I. Gefter, A.B., M.D., F.A.C.P., Bernard H. Pastor, A.B., M.D., F.A.C.P., and Ralph M. Myerson, B.S., M.D., F.A.C.P. Pp. 877. Illus. 240. Price $9.85. St. Louis, The C. V. Mosby Company, 1965.

Surgery of the Parotid Gland. By Robin Anderson, M.D., F.A.C.S., and Louis T. Byars, M.D., F.A.C.S. Pp. 117. Illus. 127. Price $12.75. St. Louis, The C. V. Mosby Company, 1965.

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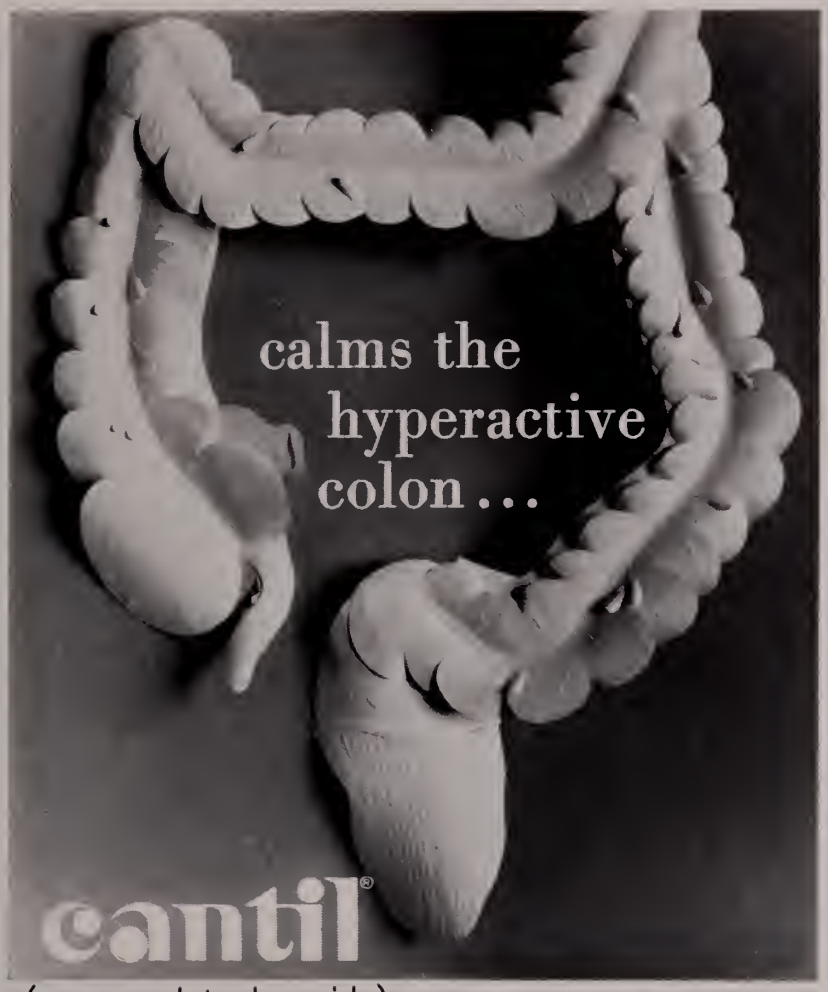

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1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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References:

1. Schwarz, A.J.F.: Amer. J. Dis. Child., **103:** 386-389, 1962.
2. Krugman, S. et al.: Pediatrics, **31:** 919-928, 1962.
3. Andelman, S. L. et al.: J.A.M.A., **184:** 721-723, 1963.
4. Measles Vaccines: W.H.O. Technical Report Series No. 263, 1963.
5. Schwarz, A.J.F.: Annales Paediatrici, **202:** 241-253, 1964.
6. Morley, D. C. et al.: Bull. W.H.O., **30:** 733-739, 1964.
7. Andelman, S. L. et al.: Scientific exhibit at annual meeting of The American Academy of Pediatrics, 1964.
8. Krugman, S. et al.: J. Pediatrics, **66:** 471-488, 1965.

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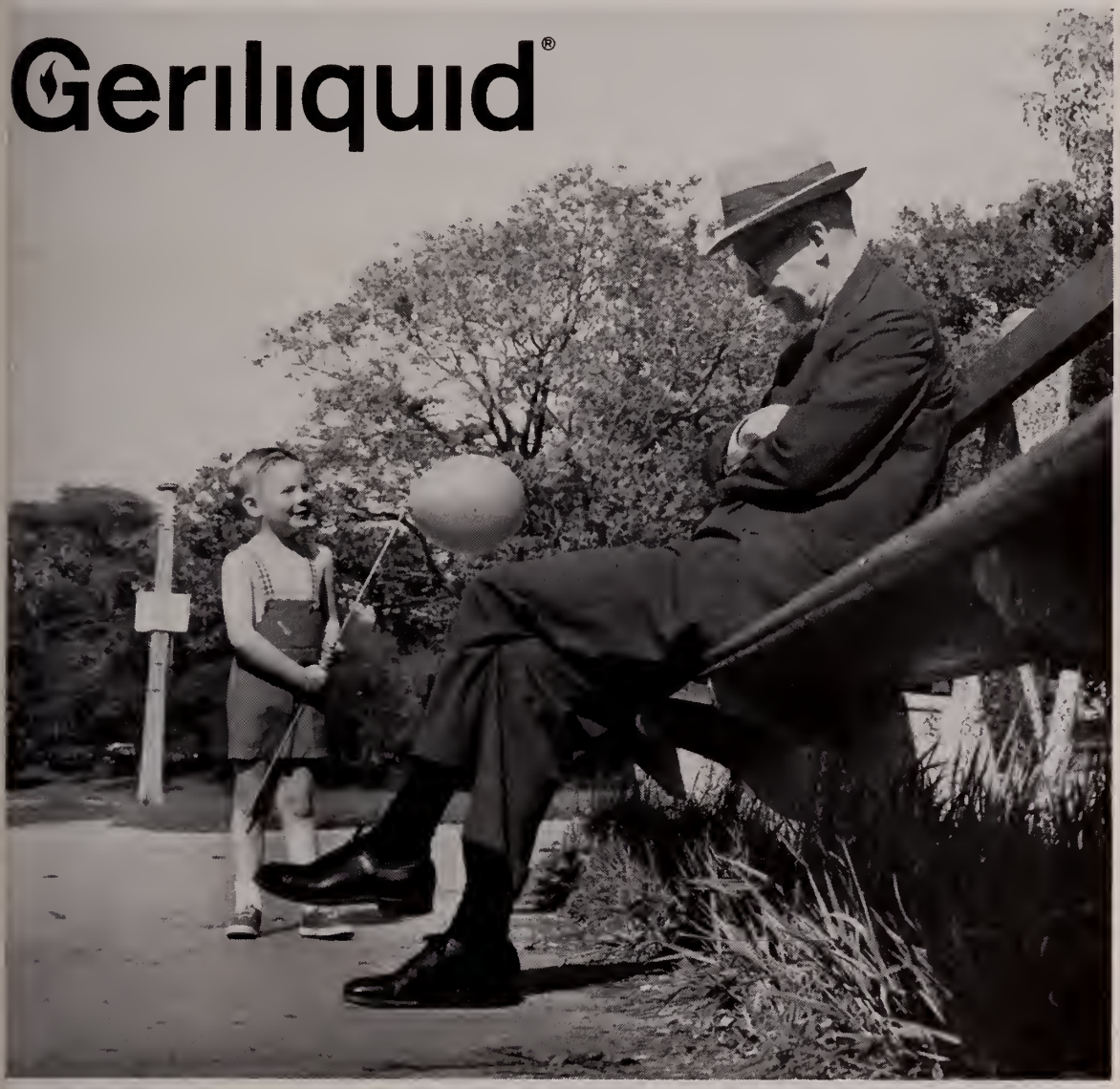

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duo-CVP
(double-strength CVP)

C.V.P. and duo-C.V.P. are believed to act by decreasing abnormal permeability and fragility of capillaries, and thereby reducing bleeding or diapedesis from these vessels. C.V.P. and duo-C.V.P. provide the original and exclusive bioflavonoid compound from citrus, which is a specially processed concentrate of the biologically active water-soluble factors.

Each C.V.P. capsule, or 5 cc. (approx. 1 teaspoonful) syrup provides:		Each duo-C.V.P. capsule provides:
CITRUS BIOFLAVONOID COMPOUND	100 mg.	200 mg.
ASCORBIC ACID (vitamin C)	100 mg.	200 mg.
capsules — bottles of 100 and 500 syrup — bottles of 4 oz., 16 oz. and gallon		bottles of 50, 100 and 500

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more complete relief for the "dyspeptic"

DACTILASE®

Dactilase provides comprehensive therapy for a wide range of digestive disorders. Its antispasmodic and anesthetic actions rapidly relieve pain and spasm. Dactilase decreases hypermotility without inducing stasis. In addition, it supplies digestive enzymes to help reduce bloating, belching and flatulence. Dactilase does not interfere with normal digestive secretions. Very often it can be a most useful answer to the dyspeptic's needs.

DACTILASE: Each tablet contains: Dactil® (piperidolate hydrochloride), 50 mg.; Standardized cellulolytic* enzyme, 2 mg.; Standardized amylolytic enzyme, 15 mg.; Standardized proteolytic enzyme, 10 mg.; Pancreatin 3X** (source of lipolytic activity), 100 mg.; Taurocholic acid, 15 mg.

*Need in human nutrition not established. **As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

Side Effects and Contraindications: DACTILASE is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following each meal. Tablets should be swallowed whole.

Supplied: Bottles of 60 and 250.

LAKESIDE LABORATORIES, INC.
Milwaukee, Wisconsin 53201

Happily,
not all your patients
are overweight

but
for those who are...

Bamadex®

d-amphetamine sulfate (15 mg.) and meprobamate (300 mg.)

Sequels®

Sustained Release Capsules

Most overweight patients could benefit from the appetite control provided by the prolonged anorexigenic-tranquilizing action of BAMADEX SEQUELS: anorexigenic action through the central stimulant effect of the amphetamine; tranquilizing action with only mild sedation through meprobamate; prolonged action through sustained release of active ingredients.

Contraindications: Hyperexcitable and prepsychotic states; patients hypersensitive to meprobamate.

Side Effects: Occasional allergic skin reactions may occur with meprobamate, accompanied by fever, nonthrombocytopenic purpura, angioneurotic edema, hypotension, or bronchial spasm. Drowsiness with or without ataxia and/or alteration in visual accommodation may occur. Effects of alcoholic beverages may be increased by meprobamate. Use with caution in patients with coronary or cardiovascular disease or severe hypertension. Prolonged use may result in dependence. Reactions can occur if drug is not withdrawn gradually.

LEDERLE LABORATORIES • A Division of AMERICAN CYANAMID COMPANY, Pearl River, N.Y. Lederle

6206

WHEN MOTHER'S IRON ISN'T UP TO MOTHERHOOD

IN BRIEF: ACTIONS AND USES: A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency anemia may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion *as a source of iron;* infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. of elemental iron in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylactoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache, and fever have occasionally been reported. Initial test doses of 0.5 cc. are advisable.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only, it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

in iron deficiency anemia for rapid and predictable replacement of iron reserves

imferon®

(iron dextran injection)

LAKESIDE LABORATORIES, INC. • Milwaukee, Wisconsin 53201

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Hygroton®
brand of chlorthalidone
the long-acting diuretic

Indications
Many types of edema involving retention of salt and water.
Contraindications
Hypersensitivity, and most cases of severe renal or hepatic disease.
Precautions
Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.
Side Effects
Constipation, dizziness, dysuria, headache, hyperglycemia, hyperuricemia, leukopenia, muscle cramps, nausea, purpura, thrombocytopenia, transient myopia, urticaria, vomiting and weakness.
Average Dosage
One tablet (100 mg.) daily with breakfast.
Availability
Tablets of 100 mg. in bottles of 100 and 1000.
For full details, see the complete prescribing information.

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brand of chlorthalidone
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Not very high. In terms of one week's therapy, that is. The usual dosage is just one tablet per day. Very often, the dosage is even lower. So a week's therapy doesn't amount to much.

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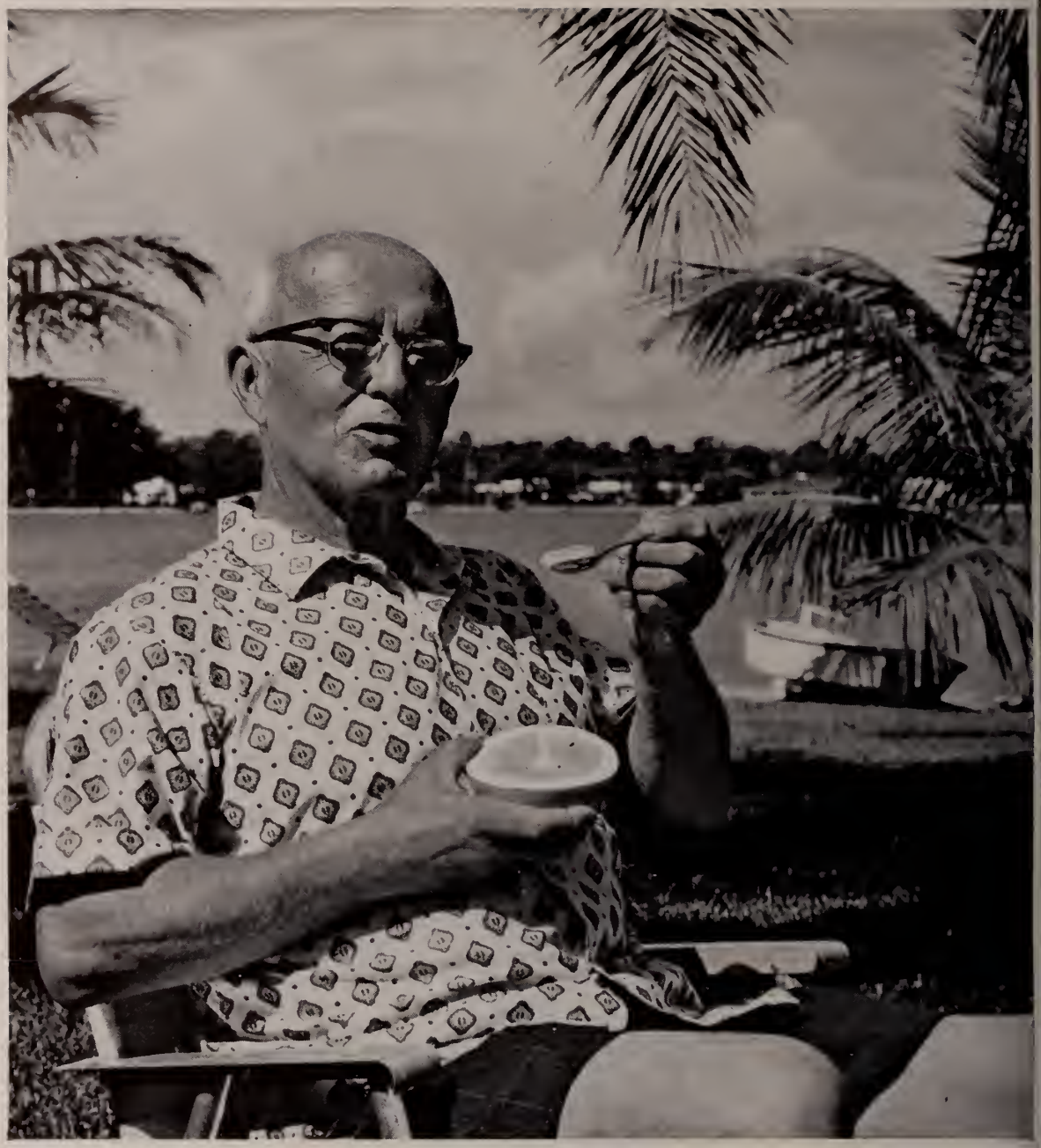

The good life—just what the doctor ordered

Sea and sun are both in his doctor's orders — so is that grapefruit he's eating with such gusto. Citrus fruit is a wonderful way for this patient or any patient to get his daily quota of vitamin C . . . to enjoy something good to eat, tasty and satisfying but not rich.

Not all patients are so lucky as to have retired to Florida, where they can pick citrus fruit off their own trees. But any patient anywhere can get the same benefits of the natural vitamin C in Florida oranges, grapefruit, and tangerines . . . thanks to modern methods of processing fresh fruit. Whether it is frozen, canned, or in cartons, 98% of the vitamin C content of the fruit is preserved.

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The human spine is not engineered for prolonged sitting at desks, pianos, typewriters and drafting boards. The stresses set up by the heavy, forward-tilted head and trunk, balanced precariously on an insufficient base, result in strain of the dorsal musculature, particularly at the low lumbar level.

The unusual muscle-relaxant and analgesic properties of 'Soma' make it especially useful in the treatment of low back sprains and strains. 'Soma' is widely prescribed ☐ **to relieve pain** ☐ **to relax muscles** ☐ **to restore mobility.**

Indications: 'Soma' is useful for management of muscle spasm, pain, and stiffness in a variety of inflammatory, traumatic, and degenerative musculoskeletal conditions. It also may act to normalize motor activity in certain neurologic disturbances.

Contraindications: Allergic or idiosyncratic reactions to carisoprodol.

Precautions: 'Soma', like other central nervous system depressants, should be used with caution in patients with known propensity for taking excessive quantities of drugs and in patients with known sensitivity to compounds of similar chemical structure, e.g., meprobamate.

Side Effects: The only side effect reported with any frequency is sleepiness, usually on higher than recommended doses. An occasional patient may not tolerate carisoprodol because of an individual reaction, such as a sensation of weakness. Other rarely observed reactions have included dizziness, ataxia, tremor, agitation, irritability, headache, increase in eosinophil count, flushing of face, and gastrointestinal symptoms.

One instance each of pancytopenia and leukopenia, occurring when carisoprodol was administered with other drugs, has been reported, as has an instance of fixed drug eruption with carisoprodol and subsequent cross reaction to meprobamate. Rare allergic reactions, usually mild, have included one case each of anaphylactoid reaction with mild shock and angioneurotic edema with respiratory difficulty, both reversed with appropriate therapy. In cases of allergic or hypersensitivity reactions, carisoprodol should be discontinued and appropriate therapy initiated. Suicidal attempts may produce coma and/or mild shock and respiratory depression.

Dosage: Usual adult dose is one 350 mg. tablet three times daily and at bedtime.

Supplied: Two Strengths: 350 mg. white tablets and 250 mg. orange, two-piece capsules.

Before prescribing, consult package circular.

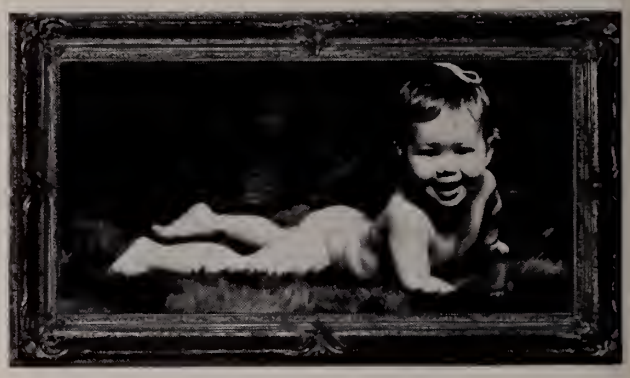
for the relief of low back sprains and strains

SOMA®
(CARISOPRODOL)

Wallace Laboratories, Cranbury, N.J.
26S01J

Turn a bundle of colic

into a bundle of joy



COLIC, often in part a reflection of family tension, adds sleepless nights to patients' and parents' distraught days. Pediatric Piptal with Phenobarbital slows down spasm, diminishes pain and crying, improves feeding patterns . . . permits sleep and rest . . . for patient and family.

Pleasant tasting Pediatric Piptal with Phenobarbital is miscible in milk, formulas and fruit juices, and may also be administered by dropper directly on the infant's tongue. Dosage is 0.5 cc. 15 minutes before feeding; in severe cases, 1.0 cc. four times daily. High doses may occasionally cause constipation with tenesmus and, rarely, flushing without fever. Contraindicated in bowel obstruction or sensitivity to phenobarbital or anticholinergics. Available in 30 cc. dropper bottles, droppers calibrated to deliver 0.5 cc.

PEDIATRIC PIPTAL® WITH PHENOBARBITAL

each cc. contains: 6 mg. phenobarbital (warning: may be habit forming); 4 mg. Piptal® (pipenzolate bromide), and 20% alcohol in a pleasant-tasting solution.

LAKESIDE LABORATORIES, INC.
Milwaukee, Wisconsin 53201

duodenal ulcer

Prompt relief of pain and spasm in functional g.i. distress...

gastric ulcer

PIPTAL® (pipenzolate bromide) efficiently suppresses acid secretion and motility ...relieves pain and spasm of peptic ulcer. Despite its potent gastrointestinal effects, "its clinically effective therapeutic dose is well below that required to produce side reactions."[1] Because urinary retention is rarely a problem, PIPTAL (pipenzolate bromide) is "a highly desirable drug in the treatment of peptic ulcer in older patients ..."[2] Tolerance to PIPTAL (pipenzolate bromide) has not been demonstrated, and the drug may be administered over prolonged periods without loss of efficacy. *PIPTAL-PHB is specifically designed for the tense ulcer patient who will benefit from the sedative effect of phenobarbital.*

1—Pomeranze, J., and Gadek, R.J.: Am. Pract. & Digest Treat. *8*:73-77 (Jan.) 1957

2—Asher, L.M.: Am. J. Digestive Diseases *4*:272 (Apr.) 1959

PIPTAL®

(pipenzolate bromide)

PIPTAL®-PHB

(phenobarbital, 16 mg., pipenzolate bromide, 5 mg.)

IN BRIEF: PIPTAL—Each tablet contains 5 mg. pipenzolate bromide, PIPTAL-PHB—Each tablet (or 5 cc. of elixir) contains phenobarbital (warning: may be habit forming) 16.0 mg., Piptal (pipenzolate bromide) 5 mg. The elixir contains alcohol 20%.

Side Effects: Dry mouth, blurring of vision or drowsiness may occur.

Contraindications: Withhold in glaucoma, bladder or g.i. obstruction, cardiac arrhythmias and in sensitivity to anticholinergics or phenobarbital (Piptal-PHB). Caution should be observed in patients with prostatic hypertrophy.

Administration and Dosage: PIPTAL or PIPTAL-PHB Tablets: One tablet three times a day before meals and one or two tablets at bedtime. (PIPTAL-PHB Elixir: One teaspoonful three or four times daily for adults and children over six years of age.)

Supplied: PIPTAL (pipenzolate bromide) 5.0 mg. Tablets—bottles of 100. PIPTAL-PHB Tablets—bottles of 100. PIPTAL-PHB Elixir—bottles of 8 fluid ounces.

LAKESIDE LABORATORIES, INC. Milwaukee, Wisconsin 53201

First of all for mild hypertension

Serpasil® (reserpine)

You can obtain starter samples by filling out and returning this coupon.

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- **produces a gradual, sustained lowering of blood pressure,** especially in the neurogenic type of hypertension
- **relieves anxiety and tension,** induces a sense of well-being in hypertensive patients with a low reaction threshold for stressful situations
- **slows the rapid heart** and maintains the slowed rate

Build on Serpasil

- **serves as baseline therapy** for certain other more potent antihypertensive agents
- **permits lower dosage** of added potent antihypertensive drugs, minimizing incidence and severity of side effects
- **brings about increased therapeutic response** when combined with certain other antihypertensives

Serpasil®
(reserpine CIBA)

INDICATIONS: Mild to moderate hypertension. CAUTIONS: Severe mental depression has appeared in a small percentage of patients, primarily in a dosage above 1 mg daily. Usually the patient had a preexisting, incipient, endogenous depression which was unmasked or accentuated by reserpine. When the drug is discontinued, depression usually disappears, but hospitalization and shock therapy are sometimes required. Daily dosage above 0.25 mg is contraindicated in patients with a history of mental depression or peptic ulcer; use lower doses with caution. Not recommended in aortic insufficiency. Withdraw reserpine 2 weeks before surgery, if possible. For emergency surgical procedures, give vagal blocking agents parenterally to reverse hypotension and/or bradycardia. Use cautiously with digitalis, quinidine, or guanethidine. When patients on reserpine receive electroshock therapy, use lower milliamperage and a shorter duration of stimulus initially. Shock therapy within 7 days after giving the drug is hazardous. SIDE EFFECTS: Occasional: lassitude, drowsiness, nasal congestion, looseness of stools, increased frequency of defecation. Rare: anorexia, headache, bizarre dreams, nausea, dizziness. Nasal congestion and increased tracheobronchial secretions may occur in newborn babies of mothers treated with reserpine. AVERAGE DOSAGE: *Initial*—Two 0.25-mg tablets p.c. daily. *Maintenance*—Reduce daily dosage to 0.25 mg or less p.c. SUPPLIED: *Tablets,* 0.25 mg (white, scored) and 0.1 mg (white).

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in premenstrual tension

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The acute phase of subdeltoid bursitis, nitis and associated periarticular nmation usually responds promptly and atically to Butazolidin, brand of phenyl- one. Pain and tenderness may be ed within 24-48 hours and mobility of fected arm quickly restored. Full ery is frequently achieved within 7-10 so that therapy is generally of short ion. Calcific deposits are not specifi- affected by treatment, but their pres- does not appear to retard symptomatic vement.

lbutazone has not replaced physio- y, x-ray treatment, or local injections rocortisone in the more chronic condi- but it may advantageously be com- with these measures.

indications
, danger of cardiac decompensation; or symptoms of peptic ulcer; renal, or cardiac damage; history of drug ; history of blood dyscrasia. Because ncreased possibility of toxic reac- he drug should not be given when the is senile, or when other potent therapeutic agents are given concur- Large doses of Butazolidin alka are ndicated in patients with glaucoma.

tions
prescribing, the physician should a detailed history and perform a complete physical and laboratory examination, including a blood count. The patient should be kept under close supervision and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools. Regular blood counts should be made. The drug should be used with greater care in the elderly.

Warning
If coumarin-type anticoagulants are given simultaneously, the physician should watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea and sulfonamide-type agents and insulin. Patients receiving such concomitant therapy should be carefully observed for this effect.

Adverse Reactions
The most common adverse reactions are nausea, edema and drug rash. The drug may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, generalized allergic reaction, stomatitis, salivary gland enlargement, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia are also possible side effects. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently.

Average Dosage
Initially, give 400 mg. daily (one tablet or capsule q.i.d.), reducing this, if possible, when a favorable therapeutic effect has been obtained. If after one week there has been no response, discontinue the drug. To minimize gastric distress, Butazolidin alka capsules may be the preferred form.

Note: The physician should be fully aware of dosage, precautions, adverse reactions, and contraindications as contained in the complete prescribing information.

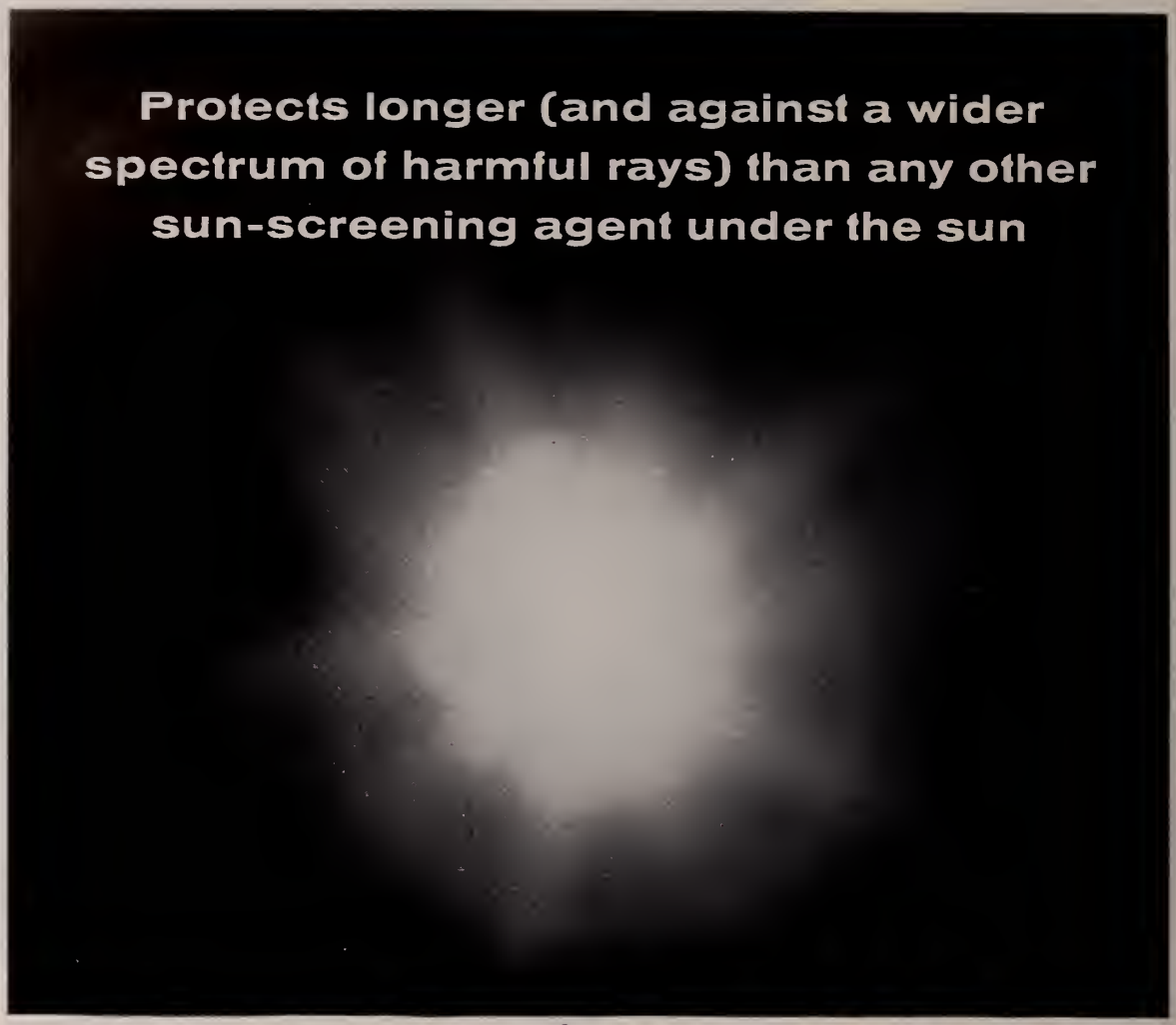
Butazolidin alka

Each capsule contains:	
Butazolidin, brand of phenylbutazone	100 mg.
dried aluminum hydroxide gel	100 mg.
magnesium trisilicate	150 mg.
homatropine methylbromide	1.25 mg.

Butazolidin
brand of phenylbutazone
Tablets of 100 mg.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

BU-3144P



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she's calm and alert

When a tranquilizer is needed, 'Stelazine' can regulate the level of anxiety so that the patient is unlikely to overreact to stress but is not tranquilized into psychic inertia. Patients on 'Stelazine' often experience a sense of mental alertness and, because they feel so much better, are more interested in their normal activities.

Contraindicated in comatose or greatly depressed states due to CNS depressants and in cases of existing blood dyscrasias, bone marrow depression and pre-existing liver damage. *Principal side effects,* usually dose-related, may include mild skin reaction, dry mouth, insomnia, fatigue, drowsiness, dizziness and neuromuscular (extrapyramidal) reactions. Muscular weakness, anorexia, rash, lactation and blurred vision may also be observed. Blood dyscrasias and jaundice have been extremely rare. Use with caution in patients with impaired cardiovascular systems.

Before prescribing, see SK&F product Prescribing Information.

Photograph professionally posed.

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A patient centered independent hospital for intensive treatment of nervous disorders . . .

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Contraindications: Infants, patients with history of convulsive disorders or glaucoma.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazardous procedures until correct maintenance dosage is established; driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warn patients of possible combined effects with alcohol. Safe use in pregnancy not established. Observe usual precautions in impaired renal of hepatic function and in patients who may be suicidal; periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances and hallucinations) and changes in EEG patterns. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

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November, 1965
Vol. 52, No. 11

The JOURNAL of the Florida Medical Association

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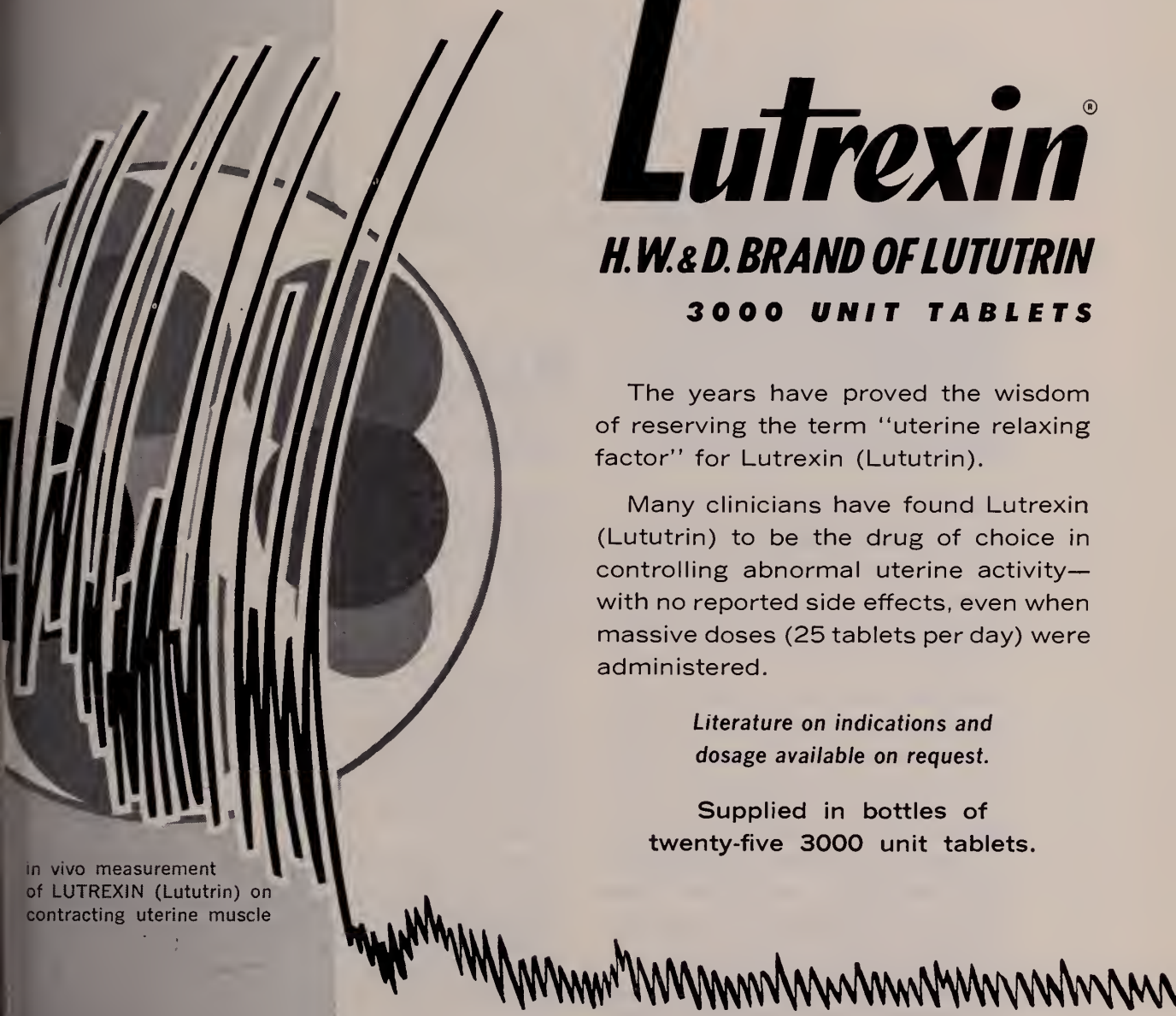

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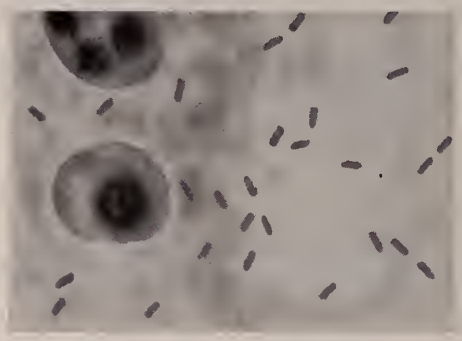

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References: (1) Carroll, G.: Urologists' Letter Club, June 1, 1964. (2) McDonald, D. F., and Short, H. B.: Address to the Fourth Interscience Conference on Antimicrobial Agents and Chemotherapy, New York, Oct. 26-28, 1964.

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of the Florida Medical Association

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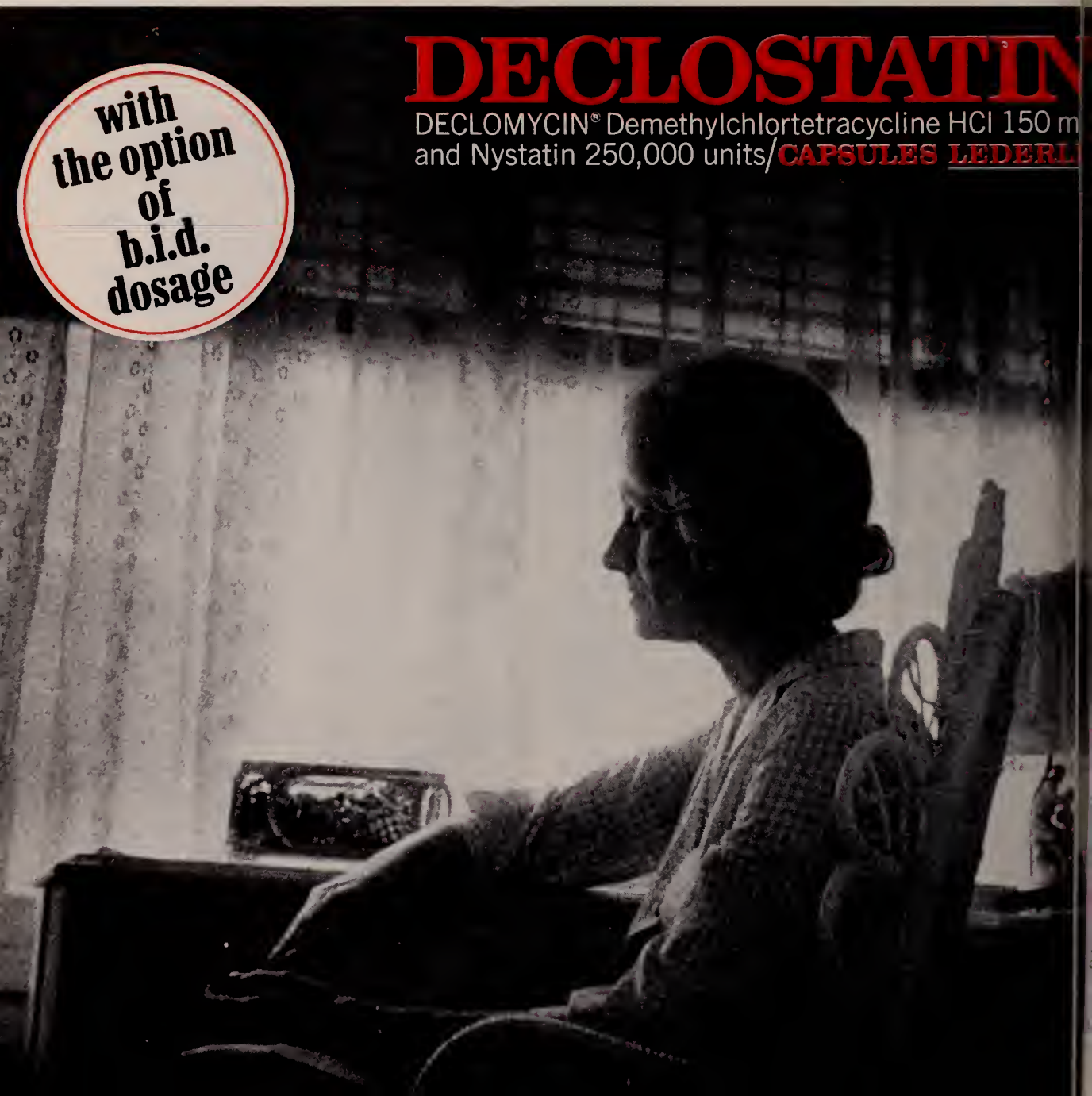

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190 / 102

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Lehmann, H. E., Canad. Psychiat. Assn. J. *4(S)*: 1-12, 1959

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Meprobamate—Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses. Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single case of fatal bullous dermatitis after administration of meprobamate and prednisolone have been reported. More severe and very rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstituted. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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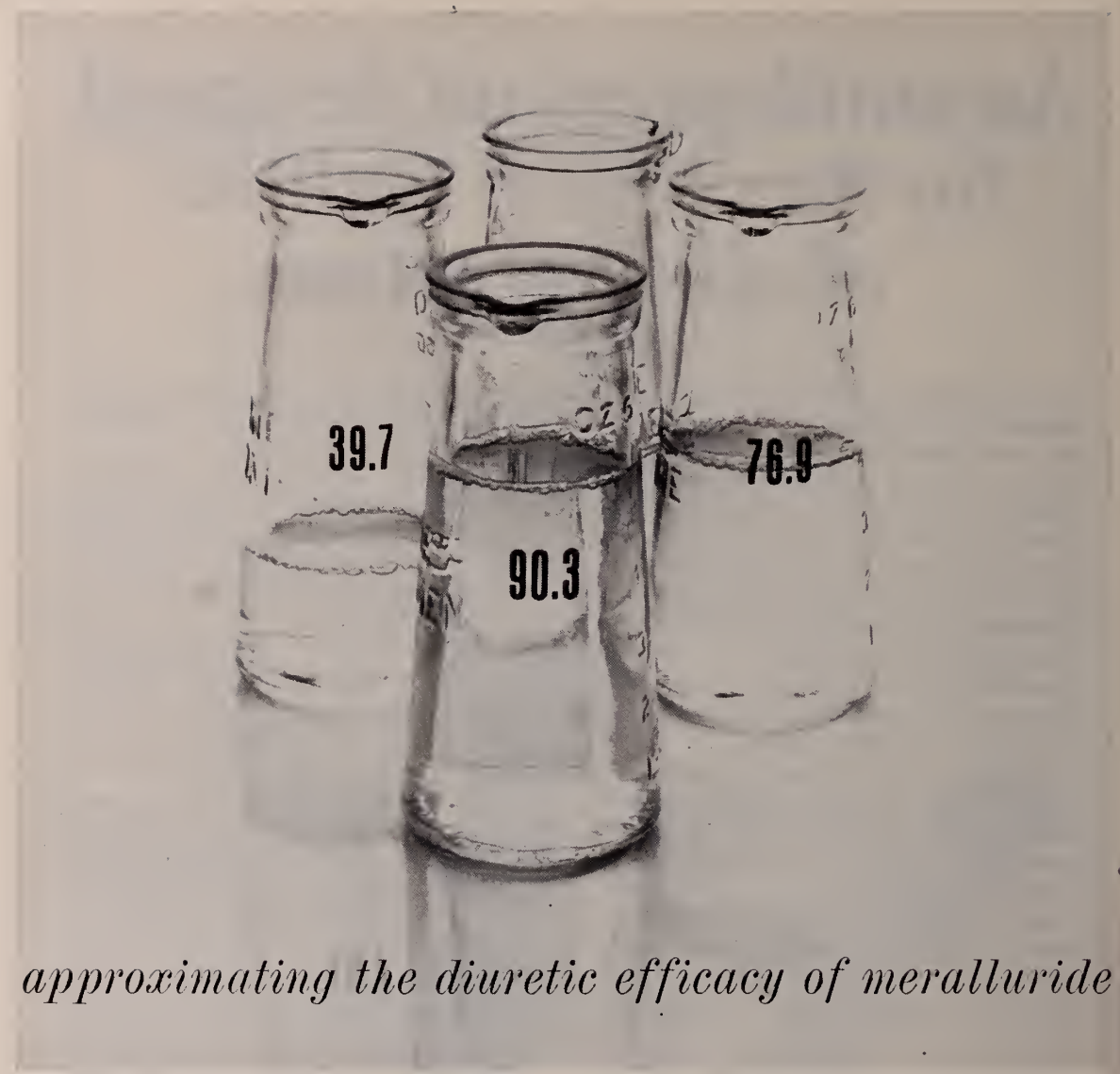

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*Gold, H., *et al*: Closed Panel Conference: Present Status of the Management of Congestive Failure and Advances in Diuretic Therapy, Journal of New Drugs, 1:177, July-August, 1961.

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If it's the useless, exhausting type of cough that often accompanies respiratory infection or allergy, you can provide prompt relief with Novahistine DH. Its decongestant-antitussive action controls frequency and intensity of cough spasms without abolishing cough reflex. And the fresh, grape flavor of Novahistine DH appeals to children and adults alike.

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Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Ambulatory patients should be advised that drowsiness may result. Continuous dosage over an extended period is contraindicated since codeine phosphate may cause addiction.

Each 5 ml. teaspoonful of Novahistine DH contains phenylephrine hydrochloride, 10 mg., chlorpheniramine maleate, 2 mg., codeine phosphate, 10 mg. (Warning: may be habit forming), chloroform (approx.), 13.5 mg., l-menthol, 1 mg., Alcohol 5%. Each 5 ml. of Novahistine Expectorant contains the above ingredients and, in addition, glyceryl guaiacolate, 100 mg.

NOVAHISTINE® DH

NOVAHISTINE® EXPECTORANT

PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis, U.S.A. DOW

Butazolidin® alka

Each capsule contains:

Butazolidin, brand of phenylbutazone	100 mg.
dried aluminum, hydroxide gel	100 mg.
magnesium trisilicate	150 mg.
homatropine methylbromide	1.25 mg.

in painful shoulder

Geigy

erapeutic Effects
e acute phase of subdeltoid bursitis, ndinitis and associated periarticular lammation usually responds promptly and amatically to phenylbutazone. Pain and nderness may be relieved within 24-48 urs and mobility of the affected arm ickly restored. Full recovery is frequently hieved within 7-10 days so that therapy is nerally of short duration. Calcific deposits not specifically affected by treatment, t their presence does not appear to retard nptomatic improvement.

enylbutazone has not replaced physio- rapy, x-ray treatment, or local injections ydrocortisone in the more chronic condi- ns, but it may advantageously be com- ed with these measures.

ntraindications
ema, danger of cardiac decompensation; tory or symptoms of peptic ulcer; renal, atic or cardiac damage; history of drug rgy; history of blood dyscrasia. Because he increased possibility of toxic reac- ns, the drug should not be given when the ient is senile, or when other potent chem- erapeutic agents are given concurrently. ge doses of Butazolidin alka are con- ndicated in patients with glaucoma.

cautions
ore prescribing, the physician should ain a detailed history and perform a com- e physical and laboratory examination, including a blood count. The patient should be kept under close supervision and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools. Regular blood counts should be made. The drug should be used with greater care in the elderly.

Warning
If coumarin-type anticoagulants are given simultaneously, the physician should watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea and sulfonamide-type agents and insulin. Patients receiving such concomitant therapy should be carefully observed for this effect.

Adverse Reactions
The most common adverse reactions are nausea, edema and drug rash. The drug may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, generalized allergic reaction, stomatitis, salivary gland enlargement, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia are also possible side effects. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently.

Average Dosage
Initially, give 400 mg. daily (one capsule q.i.d), reducing this, if possible, when a favorable therapeutic effect has been obtained. If after one week there has been no response, discontinue the drug. Butazolidin alka contains antacids and an antispasmodic to minimize gastric upset.

Note: The physician should be fully aware of dosage, precautions, adverse reactions, and contraindications as contained in the complete prescribing information.

Also available:
Butazolidin®
brand of phenylbutazone
Tablets of 100 mg.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

BU 4010P

BRING THE TREATMENT TOGETHER IN A SINGLE PRESCRIPTION

ACHROCIDIN®

Tetracycline HCl-Antihistamine-Analgesic Compound

Each tablet contains:

ACHROMYCIN® Tetracycline HCl	125 mg
Acetophenetidin (Phenacetin)	120 mg
Caffeine	30 mg
Salicylamide	150 mg
Chlorothen Citrate	25 mg

Effective in controlling complicating tetracycline-sensitive bacterial infection and providing symptomatic relief in allergic diseases of the upper respiratory tract. Possible side effects include drowsiness, slight gastric distress, anorexia, overgrowth of nonsusceptible organisms, tooth discoloration (if given during tooth formation), photodynamic reaction to sunlight and increased intracranial pressure (in young infants). Average adult dosage: 2 tablets four times daily, given at least one hour before, or two hours after meals. Patient should avoid direct exposure to artificial or natural sunlight; and should not drive a car or operate machinery while on drug. Reduce dosage in impaired renal function. Stop drug immediately at the first sign of adverse reaction.

LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, N.Y. Lederle

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more complete relief for the "dyspeptic"

DACTILASE®

Dactilase provides comprehensive therapy for a wide range of digestive disorders. Its antispasmodic and anesthetic actions rapidly relieve pain and spasm. Dactilase decreases hypermotility without inducing stasis. In addition, it supplies digestive enzymes to help reduce bloating, belching and flatulence. Dactilase does not interfere with normal digestive secretions. Very often it can be a most useful answer to the dyspeptic's needs.

DACTILASE: Each tablet contains: Dactil® (piperidolate hydrochloride), 50 mg.; Standardized cellulolytic* enzyme, 2 mg.; Standardized amylolytic enzyme, 15 mg.; Standardized proteolytic enzyme, 10 mg.; Pancreatin 3X** (source of lipolytic activity), 100 mg.; Taurocholic acid, 15 mg.

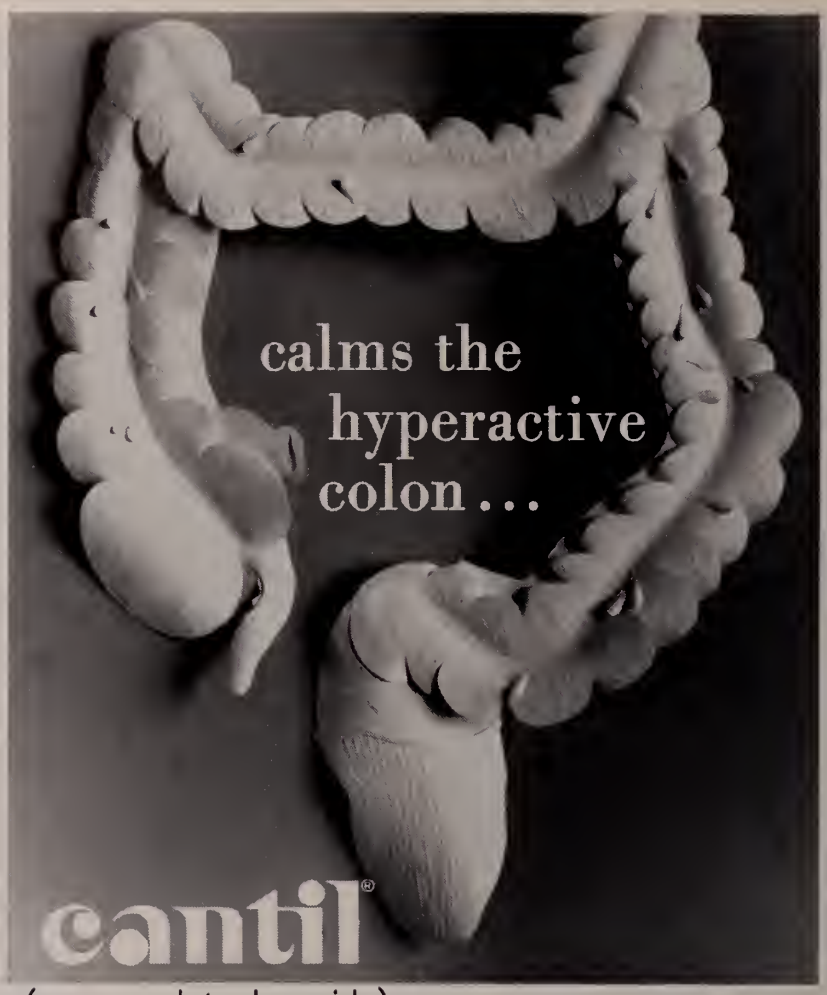
*Need in human nutrition not established. **As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

Side Effects and Contraindications: DACTILASE is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following each meal. Tablets should be swallowed whole.

Supplied: Bottles of 60 and 250.

LAKESIDE LABORATORIES, INC.
Milwaukee, Wisconsin 53201



(mepenzolate bromide)

helps restore normal motility and tone

Cantil (mepenzolate bromide) works in the colon. In irritable colon, spastic colon, ulcerative colitis and other functional and organic colonic disorders, it acts to:

- control diarrhea/constipation
- relieve spasm, cramping, bloating
- make patients more comfortable

with little effect on stomach, bladder or other viscera.

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects. Blurring of vision or dryness of the mouth were occasionally seen and were usually managed with a reduction in dosage. Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF:

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250.

CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

LAKESIDE LABORATORIES, INC.
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effective
GERIATRIC
antiarthritic
with

REASSURING SAFETY FACTORS

Effectiveness, dependability and reassuring Safety Factors make PABALATE-SF a logical choice for antiarthritic therapy in elderly patients—even when osteoporosis, hypertension, edema, peptic ulcer, cardiac damage, latent chronic infection and other common geriatric conditions are present. The potassium salts of PABALATE-SF cannot contribute to sodium retention...the enteric coating assures gastric tolerance...and clinical experience shows that this preparation does not precipitate the serious reactions often associated with corticosteroids or pyrazolone derivatives.

Side Effects: Occasionally, mild salicylism may occur, but it responds readily to adjustment of dosage. Precaution: In the presence of severe renal impairment, care should be taken to avoid accumulation of salicylate and PABA. Contraindicated: An hypersensitivity to any component.

Also available: PABALATE—when sodium salts are permissible. PABALATE-HC—Pabalate-SF with hydrocortisone.

Pabalate-SF

In each persian-rose enteric-coated tablet: potassium salicylate 0.3 Gm., potassium aminobenzoate 0.3 Gm., ascorbic acid 50.0 mg.

—the new, convenient way to prescribe
PABALATE-SODIUM FREE

H. ROBINS CO., INC., RICHMOND 20, VIRGINIA

An eminent role in medical practice

- Clinicians throughout the world consider meprobamate a therapeutic standard in the management of anxiety and tension.
- The high safety-efficacy ratio of 'Miltown' has been demonstrated by more than a decade of clinical use.

Miltown®
(meprobamate)

Indications: 'Miltown' (meprobamate) is effective in relief of anxiety and tension states. Also as adjunctive therapy when anxiety may be a causative or otherwise disturbing factor. Although not a hypnotic, 'Miltown' fosters normal sleep through both its anti-anxiety and muscle-relaxant properties.

Contraindications: Previous allergic or idiosyncratic reactions to meprobamate or meprobamate-containing drugs.

Precautions: Careful supervision of dose and amounts prescribed is advised. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after use for weeks or months at excessive dosage. Abrupt withdrawal may precipitate recurrence of pre-existing symptoms, or withdrawal reactions including, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, the dose should be reduced and operation of motor vehicles or machinery or other activity requiring alertness should be avoided if these symptoms are present. Effects of excessive alcohol may possibly be increased by meprobamate. Grand mal seizures may be precipitated in persons suffering from both grand and petit mal. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

Side effects: Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses. Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single case of fatal bullous dermatitis after administration of meprobamate and prednisolone have been reported. More severe and very rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstituted. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

Usual adult dosage: One or two 400 mg. tablets three times daily. Doses above 2400 mg. daily are not recommended.

Supplied: In two strengths: 400 mg. scored tablets and 200 mg. coated tablets.

Before prescribing, consult package circular.

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Cranbury, N.J.

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ıen
pirin alone
too little

but
full steroid
is too much

ı time for *aspirin*—when the pain
ıess are almost bearable and easily
d.... There's a time for full-dosage
for limited periods, as in severe
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ange symptoms, in your judgment,
ıiddle-range therapy. With SIGMAGEN,
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nd analgesic action to relieve
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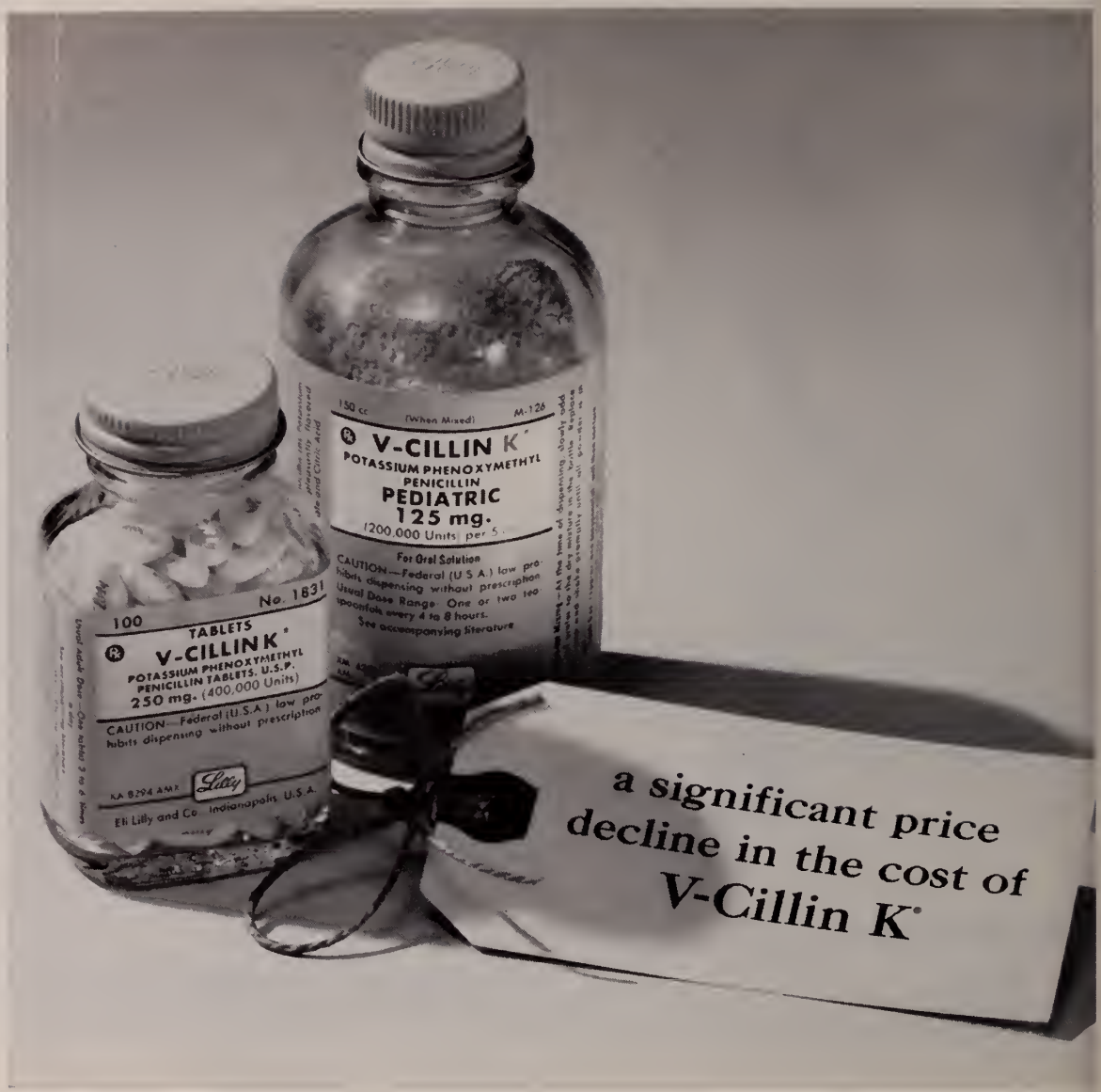
middle-range therapy with Sigmagen® TABLETS

brand of corticoid-analgesic compound

Each tablet contains 0.75 mg. prednisone, 325 mg. acetylsalicylic acid, 20 mg. ascorbic acid, 75 mg. aluminum hydroxide.

Clinical considerations: Precautions — SIGMAGEN Tablets should be used with the same precautions as other corticosteroids. They should not be used in patients with tuberculosis, peptic ulcer, agitated psychotic states, or herpes simplex of the eye. The physician must be watchful in patients with cardiac decompensation, severe hypertension, diabetes mellitus renal insufficiency, osteoporosis, and marked emotional instability or psychotic tendency. Acute infections must be controlled with appropriate agents. Corticosteroids may mask signs of infection. For more complete details, consult Schering literature available from your Schering Representative or Medical Services Department, Union, N.J. 07083. S-77



V-Cillin K now costs approximately 21 percent less. This significant price decline constitutes a substantial saving and still offers these important benefits over penicillin G:

The effectiveness of intramuscular penicillin. Just three 250-mg. doses daily provide total twenty-four-hour penicillin blood levels equal to those achieved by injection of 600,000 units of procaine penicillin G. A fourth dose increases daily penicillemia to levels 35 percent above those achieved by injection.

Consistent dependability—even in the presence of food. Comparative pharmacologic data show that V-Cillin K produces peak blood levels *twice* as high as those of penicillin G, with *half* the dose.

New, thin coating . . . new size and shape. The new coating eliminates the characteristically bitter taste of oral penicillin and makes V-Cillin K tablets easy to swallow. The new shape makes them easy for physicians and pharmacists to identify.

Indications: V-Cillin K is an antibiotic useful in the treatment of streptococcus, pneumococcus, and gonococcus infections and infections caused by sensitive strains of staphylococci.

Contraindications and Precautions: Although sensitivity reactions are much less common after oral than after parenteral administration, V-Cillin K should not be administered to patients with a history of allergy to penicillin. As with any antibiotic, observation for overgrowth of nonsusceptible organisms during treatment is important.

Usual Dosage Range: 125 mg. (200,000 units) three times a day to 250 mg. every four hours.

Supplied: Tablets V-Cillin K, 125 or 250 mg., and V-Cillin K, Pediatric, 125 mg. per 5-cc. teaspoonful, in 40, 80, and 150-cc.-size packages.

V-Cillin K®

Potassium Phenoxymethyl Penicillin

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana.

Lilly

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The JOURNAL
of the Florida Medical Association

Research at the University of Florida College of Medicine

The College of Medicine of the University of Florida is privileged to have had an opportunity in previous issues and to have an opportunity again in this issue of the Journal of the Florida Medical Association to present to the Florida physician some aspects of its research program. Obviously, the research endeavors of the faculty of the College of Medicine are only a fraction of the overall program of the College, but constitute an essential and fundamental part of it. Without the investigative interests and activities of the faculty, our teaching and patient service functions would not be commensurate to a university setting. Besides the obvious benefits of discovery accruing from individual investigations, research or investigation represents an attitude and a mode of thinking which are in themselves an important attribute of the physician. We consider therefore our research program an integral part of the overall teaching program of the College of Medicine.

The College of Medicine will do everything possible in its power to maintain the highest standards for teaching, research and patient care. It would not fulfill its mission if it were to omit any of these foundations of academic activity in the field of medicine. We are grateful for the opportunity given by the editors of The Journal to present ourselves and our activity in this way. Maybe there will be an opportunity at a later time to describe more fully some other aspects of our educational program, be it directed toward the medical student, house staff, practicing physician or research trainee.

Emanuel Suter, M.D.
Dean, College of Medicine
J. Hillis Miller Health Center
University of Florida
Gainesville

Research at the University of Florida College of Medicine

Department of Pharmacology and Therapeutics

THOMAS H. MAREN, M.D.*
GAINESVILLE

It is traditionally the case that Pharmacology departments are, among basic science units, perhaps the broadest in their research and teaching activities. The reason is readily apparent: we are concerned with aspects of drugs ranging from their chemical and physical properties, and indeed sometimes their synthesis, through their physiological effects, to their use in clinical medicine. Pharmacologists are thus in intimate range with problems and techniques used throughout the university and the medical institution.

The program of this department has followed this pattern. A second characteristic of this department has been the large number of medical students (perhaps 20) who have contributed work of high quality over the past seven years. A third characteristic is the close association with internal medicine through joint appointments and active clinical work by three members of our staff.

The following paragraphs summarize research since the founding of this department in 1956, with emphasis on current problems. Because research and teaching are inextricably connected here, as elsewhere, we will conclude the article with a comment on our teaching program.

Cancer Chemotherapy

(Paul Byvoet, M.D.)

This research is focused on synthesis of histones, which are basic proteins found in cell nuclei. It is known that histone biosynthesis is increased in tumors, and advantage of this action might conceivably be made in designing new drugs. A fundamental question is the link between DNA replication and histone synthesis. It has been found that these two vital processes do not stand in 1:1 relation; moreover, there is a greater turnover of histones compared to DNA synthesis in tumors than in normal tissues of the tumor-bearing rat.

Clinical cancer chemotherapy will be a part of this department's activities in the future, under the direction of W. W. Oppelt, M.D.

Mechanism of Action of Cardiac Glycosides

(Roger Palmer, M.D., Thomas K. McClane, M.D., and Bohdan R. Nechay, D.V.M.)

An interesting multiphasic attack has been made on this problem, involving action of ouabain (a model glycoside) on an enzyme ($Na^+ - K^+$ activated adenosinetriphosphatase) thought to be involved in ion transport; action of ouabain on electrical properties of a model transport system, the toad bladder; action of ouabain on renal electrolyte excretion and the effects on the isolated perfused heart. The work is characterized by a rigorous quantitative approach, with emphasis on events at concentrations of ouabain (about 1 part in 10,000,000) that are found in a digitalized patient. Results suggest that the drug may produce its effects by stimulation of this enzyme which results in shifts in ions and metabolites within the tissues.

Mechanism of Diuretic Drugs

(Bohdan R. Nechay, D.V.M.)

It has been shown that the commonly used diuretics, such as mercurials, aminophylline, the thiazides and acetazolamide, all have a different mechanism of action. It is thus reasonable, clinically, to use one when another fails, or to use certain combinations. An outgrowth of this work was the finding that aminophylline and acetazolamide (or other carbonic anhydrase inhibitors) have a remarkable and mutual synergistic action. Another finding on renal drug interactions involved reserpine, which was unexpectedly shown to block the effects of certain diuretics. The results point to a role of the autonomic nervous system in renal ion movement, but this classic problem has not been solved.

*Professor and Chairman, Department of Pharmacology and Therapeutics.

Metabolism of Trichloroethylene and Other Topics in Biochemical Pharmacology

(Kenneth C. Leibman, Ph.D.)

This anesthetic gas $Cl_2C = CHCl$ undergoes an intriguing rearrangement in the body, whereby one chlorine atom jumps from one carbon atom to the other ultimately to form metabolites such as trichloroacetic acid, Cl_3CCOOH. The reaction occurs in the liver, and can be accelerated by other drugs such as phenobarbital. This is one aspect of a search for understanding of how the body carries out certain reactions, in this case one that would appear remarkable or perhaps impossible to a chemist.

Earlier problems in biochemical pharmacology have been on the acetylation of sulfonamides and the nature of the inhibition (noncompetitive) of carbonic anhydrase by acetazolamide. In another area, the chemical interactions of the amino acid serine with other 3-carbon compounds were explored. Use was made again of an inhibitor of serine metabolism; its isomer isoserine.

Plasma Binding of Drugs: Catecholamines

(A. H. Anton, Ph.D.; Cognate Appointment with Psychiatry)

Two fundamental advances have been made with respect to the plasma binding of drugs: such binding reduces their antibacterial action; and certain drugs can displace others from their binding sites on plasma. The latter phenomenon results in a redistribution of the displaced drug in tissues including the brain. This phenomenon has added to our knowledge of drug distribution, a general subject which has been in the forefront of both our teaching and research programs. In this same connection, Dr. T. F. Muther has found striking differences in the tissue distribution among certain antibacterial sulfonamides, an observation which appears to have clinical implications.

Methods for the determination of epinephrine, norepinephrine, and other neurohumors of this type have been closely studied, and various trouble points isolated. The result is the first reproducible and rigorously controlled procedure for the measurement of these important substances. Data have been obtained on their distribution in tissues of many species.

Enzyme Inhibition and Physiological Effect: Carbonic Anhydrase as Model System

(Thomas H. Maren, M.D.)

The reaction of CO_2 with water can provide H^+ or HCO_3^- ions; conversely HCO_3^- in the red cells is eliminated as CO_2 through the lungs. These reactions are catalyzed by the enzyme carbonic anhydrase. Inhibition of this enzyme by sulfonamide drugs such as acetazolamide has thrown much light on physiological processes in the kidney, eye, pancreas, and other secretory organs; at the same time the action has been the basis for use of this drug originally as a diuretic and now as a mainstay in the treatment of glaucoma.

Our present main emphasis has been to show how these reactions in tissues can be explained quantitatively on the basis of known chemical reaction rates. Comparison has been made between kinetics and inhibition of native enzymes, compared with chemically pure enzyme.

Studies in the Chemistry and Immunology of Pure Carbonic Anhydrase

(Per J. Wistrand, M.D.)

Human red cells contain two species of carbonic anhydrase protein with differences in amino acid composition as well as in catalytic power. Both contain zinc, which is a necessary part of the structure. Starting from these findings made recently at Uppsala in Sweden and at Harvard, the binding of various sulfonamide drugs to the crystalline enzymes, under various conditions, has been studied. It has been found possible to create specific antibodies to the separate species, which specifically then bind and inhibit the individual enzyme type.

Development of New Drug for Trial in Pulmonary Disease

(David M. Travis, M.D., and Thomas H. Maren, M.D.)

An outgrowth of our work both on tissue distribution and on carbonic anhydrase inhibition was the finding of a new drug of this class which is selectively concentrated in the kidney and which causes the excretion of CO_2 in the urine. Because of the possibility that this could lower blood CO_2 in advanced pulmonary disease, this drug (which presently has only a number) is being prepared for a clinical trial. Particularly because of the new Food and Drug Administration regulations, this phase is detailed and complex.

Fine Localization of Carbonic Anhydrase Within Tissue and Cells; Gastric Studies; Drug Accumulation in Tissues

(T. F. Muther, Ph.D.)

Another outgrowth of the broad interest in carbonic anhydrase and its inhibitors is the possibility of using such powerful and specific drugs as markers for enzyme. Heavily radioactive acetazolamide is being used to bind the enzyme and localize it within gastric mucosa and renal tubules by radioautography. If successful, these studies will answer the century-old question as to which cells in the stomach manufacture acid.

Other gastric studies involve measurement of blood flow to this organ during secretion and repression of secretion, and effects of adrenocortical hormones on electrolyte patterns of the juice.

Basic work on the rate of diffusion of drugs in aqueous solution and into tissue cells has been recently done by two medical students, Sherrod Hayes and Larry Holder. This work is part of a general program on drug penetration and accumulation, which involves measurement of tissue concentrations in animals, as well as levels in the cerebrospinal fluid of "normals" and patients with meningitis.

Teaching of Pharmacology and Therapeutics

In designing our teaching program, it was envisaged that students should have a reasonable amount of time for independent work. We wished to break, in part, the slavish tradition of textbook, lecture, and laboratory. This was in fact done on a broader base than Pharmacology, and became a schoolwide program called Experimental Medicine, in which all second year students work in the research laboratory of a basic science or clinical department. It is hoped that this program will be described separately in The Journal, but in this context it must be realized that the second year basic science departments—Microbiology, Pathology, and Pharmacology—continue to give over a good deal of their formal time to this program. We believe that in this way we are teaching for the future, as well as for the present.

The Pharmacology program itself has undergone a radical change in the past year. Instead of teaching the entire course in the second year, as usually done, it has been split so that half only is taught at the conventional time. The remaining half is taught in one month (November) of the senior year, when the whole fourth year class returns to the department for a "Pharmacology Clerkship." This confrontation of now patient-oriented students with a basic science faculty has proved lively for both sides, and may be a better teaching situation than is engendered by the conventional division into "preclinical" and "clinical" years.

Therapeutics — practical pharmacology — is woven into the third year medical clerkship by having students meet on the wards weekly with pharmacologists for formal presentations or discussions of problems.

Because of the intimate connection between students and teachers in this school, a tribute to the original planning both in personnel and in architecture, it has been possible in all these diverse programs, to link teaching and research. Thus, the student is brought into the research laboratory, and may realize how hard-won true medical advances may be, and how carefully they must be judged. The teacher has the opportunity to share with the student not only the past and the present, but glimpses of the future as well.

CALLING ALL PHYSICIAN-SCIENTISTS!

Do you have some scientific information you would like to share with your Florida medical colleagues? Submit it for possible presentation on the scientific program of the 1966 Annual Meeting being held May 12-15 at the Diplomat Hotel, Hollywood.

A special session for Florida physicians has been scheduled for Friday morning, May 13. Featured will be a series of concise ten minute presentations on a variety of subjects of general interest to all practitioners.

If you would like to participate in this select session, send in a copy of your complete ten minute paper to Richard G. Connar, M.D., Chairman, Scientific Work Committee, P. O. Box 2411, Jacksonville 32203. Deadline for all such papers is January 1, 1966. Act today!

Department of Physiology

ARTHUR B. OTIS, PH.D.*
AND MELVIN J. FREGLY, PH.D.**
GAINESVILLE

Gone are the days of the smoked-drum kymograph and the inductorium. Today's Physiology Department at the University of Florida is one of the first in the country to equip its entire student laboratory with ink-writing electronic oscillographs for precise measurements of dynamic physiological functions. This model has become the prototype for many recently organized teaching and research departments of physiology throughout the country. In addition, other highly complex electronic devices such as cathode ray oscilloscope, amplifiers and transducers are an integral part of the teaching program, making this Department one of the most modern in the country.

Teaching and research are not separated functions for each faculty member; rather both are combined in an unusual approach to medical education. The lecture-laboratory course in Human Physiology is one part of a broad program which also provides the opportunity for medical students to spend the summer or to work in their spare time under the direction of a staff member pursuing specific problems in endocrinology, neurophysiology, respiration, muscle and neonatal physiology, comparative physiology or cardiovascular physiology. A student may also elect to spend a year in this research project and, with additional course work, complete the requirements for a master's degree.

Physiologists also train graduate students: to date, five master's degrees and four doctoral degrees have been awarded, and seven additional students are now working for an advanced degree. Through the reputation of its members, the Department of Physiology has attracted post-doctoral fellows from various parts of the United States, as well as from Mexico, Japan, Switzerland and the United Kingdom to spend from one to three years here.

Physiologists have crossed departmental lines both in teaching and in research. Clinical correlation lectures and demonstrations are a part of the course in Human Physiology. In research members of the Physiology Department have combined their talents with members of the Departments of Anatomy, Pathology, Medicine, Surgery, Pediatrics, Psychology and Biology. Typical also of this crossing of departmental lines is the symposium on "The Role of Salt in Cardiovascular Hypertension" sponsored by the Department of Physiology. Thirty-five internationally known clinicians and basic scientists participated. The proceedings of this symposium were published recently in the American Journal of Cardiology. Members of the Physiology Department have published some 83 papers based on research done both in the Department and in cooperation with members of other departments. A review of the research interests of members of the Physiology Department follows. It is not exhaustive but will serve to indicate the nature of some of our research activities.

Endocrinology and Experimental Hypertension

For a number of years Dr. Melvin J. Fregly has been studying experimental hypertension which he produces in rats by encapsulation of their kidneys with latex envelopes. In rats so treated cardiovascular hypertension develops in a predictable fashion and Dr. Fregly has been especially concerned with the roles which various hormonal factors play both in the genesis and maintenance of this elevated blood pressure. He has found, for example, that renal hypertension develops in the complete absence of both adrenal glands of rats. This finding suggests that the contribution of the adrenal glands cannot be of primary importance to the development of experimental cardiovascular hypertension. In other studies he has shown that induction of the hypothyroid state in rats by treatment with antithyroid drugs prevents both the development of renal hypertension and the accompanying cardiac hypertrophy. The results of these studies have lead to a search for compounds structurally similar to antithyroid drugs which will reduce hypertension without seriously disturbing normal physiological

*Professor and Chairman, Department of Physiology.
**Professor of Physiology.

function and tests are being made of a number of compounds.

Another observation is that chronic exposure of experimental rats to moderate hypoxia reduces the severity of the hypertension. Although the mechanisms involved are not yet understood, this finding seems of especial interest in view of the fact that cardiovascular hypertension rarely, if ever, occurs in human populations living permanently at high altitudes.

Dr. J. A. Straw is investigating the secretory interrelationships between thyroid and adrenal glands of rats. Studies are currently under way to determine the mechanism by which administration of thyroxine increases secretory activity of the adrenal cortex. Dr. Straw has been able to utilize the results of his basic studies to demonstrate naturally occurring interrelationships between the thyroid and adrenal glands of rats acclimated to cold air.

Dr. I. W. Waters is studying endocrine control of the spontaneous sodium chloride appetite of rats. Results of recent studies suggest that the rate of mineralocorticoid secretion by the adrenal cortex affects spontaneous sodium chloride appetite by regulating secretion of sodium into saliva. The sodium concentration in the environment of the taste buds of the tongue is considered to be the factor ultimately affecting the spontaneous sodium chloride appetite. Although the adrenal cortex has long been known to control renal sodium loss, these are the first studies to show a quantitative relationship between spontaneous NaCl intake and the adrenal secretion of mineralocorticoid. Dr. Waters, in cooperation with Dr. Straw, is also studying hepatic microsomal enzyme systems responsible for inactivation of the compound DDD, a structural analog of the insecticide DDT. Investigations are being made into the phenomenon of hepatic induction, a condition in which administration of a compound foreign to the body induces a greater rate of synthesis of the hepatic enzymes responsible for its metabolism. The role of adrenocortical hormones in induction is being studied.

Neurophysiology

Dr. E. B. Wright and his co-workers have been concerned with studies of factors influencing the origin and character of the electrical activity of peripheral nerve fibers. These studies have been carried out largely on nerves from crustaceans such as the crab and lobster and single myelinated fibers from frogs. Axons from these animals are relatively easy to dissect and, by means of microelectrodes, the electrical activity of single fibers can be studied. Dr. Wright's experiments have lead him to propose a model for the ionic basis of the electrical activity associated with excitation and inhibition, and with the collaboration of the Department of Medical Illustration he is now making a motion picture to illustrate his theory. Dr. Wright is also applying modern computer techniques to the analysis of his data and by this means is able to predict the conditions under which spontaneous repetitive firing of a nerve fiber will occur.

Recently our Department has been joined by Dr. Robert King whose research is concerned with the central nervous system of mammals. He is engaged in studies attempting to determine the manner in which the cerebellum influences and modulates the sensory information used by the central nervous system in initiating and controlling movement. Dr. King is also participating in a long term study of the effect of stimulation and destruction of certain areas of the brain of the monkey on learning and retention.

Physiology of Muscle

Physiological research on mammalian skeletal muscle is the principal interest of Dr. Wendell N. Stainsby. This research is divided into two parts. The primary investigation is concerned with the discovery and quantitation of those factors which alter the metabolic rate of muscle. Answers are sought for such questions as: Why does exercise increase the oxygen uptake by muscle? Is the increase in oxygen uptake related either to the work actually done or to how hard the muscle had to pull? In addition, Dr. Stainsby is investigating the fuels used for contraction by skeletal muscle and the metabolic by-products produced. A further aspect of the studies conducted by Dr. Stainsby concerns the local autonomous regulation of blood flow to skeletal muscle and small vessel blood pressure. Some questions for which answers are being sought are: Why does the blood flow to skeletal muscle increase when the muscle contracts? Why does the blood flow to muscle stay relatively constant when the arterial pressure is changed? Why does blood flow change when the osmotic pressure of the blood is altered? The mechanisms involved in both parts of this research form the basis of Dr. Stainsby's research interests.

Neonatal Physiology

The physiology of newborn animals is in many respects different from that of the adult. Dr. Sidney Cassin is engaged in studying such differences and the physiological changes that occur during the neonatal period, particularly with respect to circulatory, respiratory, and renal function.

The newborn of many species show a greater resistance to hypoxia than do the adults and in this connection Dr. Cassin has found that at birth the brain of rabbits contains a relatively low concentration of certain oxidative enzymes which gradually increases to adult levels during the first few days of postnatal life. Thus, a full capacity for the aerobic life of the outer world develops only after birth.

Other studies in Dr. Cassin's laboratory have dealt with the effect of alteration of ambient temperature and oxygen tension on the metabolic rate of newborn mammals. Although frequently the newborn has been considered a helpless poikilotherm, Dr. Cassin has presented evidence that the newborn mouse and rabbit respond to hypothermia with an increase in oxygen consumption.

Mrs. Betty Vogh, a graduate student in Dr. Cassin's laboratory, has carried out a number of interesting experiments to evaluate renal function in the newborn utilizing a "Stop Flow" technique. By judicious use of this technique she has been able to localize transport mechanisms in the developing kidney.

Most recently, experiments performed by Dr. Cassin and others on fetal sheep have provided information concerning the gaseous and hormonal control of the vascular resistance of the fetal pulmonary bed. The first breath is associated with an immediate and large reduction in pulmonary vascular resistance. The reduction in resistance to flow is thought to be related to a decrease in blood pCO_2 and an increase in pO_2. Also involved in the control of fetal pulmonary circulation is the adrenosympathetic system, for dibenamine was shown to abolish the pulmonary vasoconstriction obtained after the umbilical circulation was occluded.

Physiology of Breathing

The mechanics and work of breathing are a long-standing interest of Dr. Otis and recently he has enjoyed the expert collaboration of Dr. Marc Jaeger, a visiting Research Fellow from Switzerland. They have successfully developed a method by which a body plethysmograph can be used to measure the airway resistance of human subjects during normal breathing. For some purposes this method should have advantages over previous plethysmographic methods which required the subject to breathe in an abnormal panting fashion. Jaeger and Otis have also used the plethysmograph to study effects of gas compressibility on the mechanics and work of breathing. Although the importance of compressibility was shown to be small in normal persons, it is of significance in patients with obstructive emphysema. When such patients attempt to increase their ventilation greatly, they do relatively large amounts of work which is not effective in ventilating the alveoli but which serves only to compress gas trapped in the lungs. This work is physiologically useless and may even be detrimental in the sense that the patient with severe emphysema may, in attempting to increase his ventilation, use more oxygen for the increased work of breathing than he gains by the added ventilation he is able to achieve.

Hyperbaric Oxygenation

The surgical and medical application of hyperbaric oxygenation has made this a subject of much current interest. Dr. Peter Van Tassel, (M.D., College of Medicine, University of Florida, 1964) while a medical student, designed and built a small hyperbaric chamber which he used successfully to study oxygen toxicity in rats. He has found that if dimercaprol (British Anti-Lewisite) in appropriate doses is administered to rats, their survival time in 6 atmospheres of oxygen is doubled and the time for onset of the first convulsive seizure is increased 10-fold. This finding seems consistent with the notion that oxygen poisoning involves enzymes containing SH groups and that the dimercaprol acts as a competitive protecting agent.

Effect of Heparin in Hypoxic Lactacidemia

Severe prolonged hypoxia normally produces a large outpouring of lactic acid into the blood. Dr. Edward Otey has made the surprising observation that if an anesthetized dog is given heparin intravenously in a dose of 5-7 mg/kg, little, if any, excess lactate appears in the blood during exposure to severe hypoxia for periods up to two hours. The mechanism for this action of heparin is completely obscure, but the observation gives strength to previous suggestions that heparin may

have an important physiological role quite aside from its activity as an anticoagulant; indeed, the latter may normally be relatively unimportant.

Comparative Physiology

For several years Dr. Daniel Belkin has been conducting a wide-ranging program of study of the comparative physiology of reptiles. Many of these animals exhibit extremes of adaptation in various physiological mechanisms, and Dr. Belkin is using such natural experiments to help reveal information about normal physiological function. He has found that certain turtles can withstand complete anoxia of the brain for periods in excess of 24 hours, whereas most other reptiles succumb in less than 45 minutes under comparable conditions. Currently, he is attempting to determine the metabolic basis of this difference by means of isolation of the brain circulation and study of the behavioral effects of anoxia brought about by ischemia, perfusion with oxygen-free fluids, and metabolic inhibitors. Measurements of the metabolic rate of these turtles during exposure to various low-oxygen gas mixtures are also throwing light on questions of respiratory efficiency and survival in nonterrestrial environments.

Dr. Belkin is also studying the so-called diving reflex (slowing of the heart on submersion in water) which can be demonstrated in a wide variety of animals, including man. The most dramatic expression of this phenomenon occurs in a species of lizard from South America. On submersion, this animal shows a complete cessation of the heartbeat for several minutes, and a heart rate of less than one beat per minute thereafter. Detailed analysis of the electrocardiogram and blood pressure of these lizards during voluntary dives indicates that generally existing cardiovascular reflex mechanisms are entirely responsible for this remarkable performance, and thus this preparation is a powerful tool for the study of normal cardiovascular function.

General Comment

The Department of Physiology is organized primarily as a group for the teaching of medical students. Members of the Department are encouraged to develop their own individual research interests rather than to work as an organized group on a highly directed research program, as might have been the case had the Department been organized primarily as a research institute. This does not mean that individuals carry out their research projects in complete isolation for there is much spontaneous collaboration and cooperation within the Department as well as with members of other departments.

Teaching without enrichment from research becomes sterile. On the other hand, research without teaching (in the sense that teaching is communication) is futile. The specific practical application of the researches outlined to the practice of medicine is not, in some instances, immediately apparent. Most physiologists are not primarily motivated in their research by the possibility of an immediate practical application of their findings, although when they occur, such applications are always gratifying. It has been said that "The physiology of today is the medicine of tomorrow," and it is easy to point out applications of the physiology of the past in the medicine of today. It is, however, much more difficult to predict the nature of future applications of current research, but one works with the faith that they will occur.

Selected Recent Publications by Faculty in the Department of Physiology

Belkin, D. A., Anoxia: tolerance in reptiles, Science **139**:492-493, 1963.

Belkin, D. A., Variations in heart rate during voluntary diving in the turtle, *Pseudemys concinna,* Copeia #2, pp. 321-330, 1964.

Cassin, S., G. S. Dawes, J. C. Mott, B. B. Ross and L. B. Strang, The vascular resistance of the foetal and newly ventilated lung of the lamb, Journal of Physiology (London) **171**:61-79, 1964

Cassin, S., G. S. Dawes and B. B. Ross, Pulmonary blood flow and vascular resistance in immature foetal lambs, Journal of Physiology (London) **171**:80-89, 1964.

Fregly, M. J., editor, *The Role Of Salt In Cardiovascular Hypertension,* American Journal of Cardiology **8**:526-602, 684-756 and 863-912, 1961.

Fregly, M. J. and A. B. Otis, Effect of chronic exposure to hypoxia on blood pressure and thyroid function of hypertensive rats, in W. H. Weihe (ed.), *The Physiological Effects Of High Altitude,* Pergamon Press: Oxford, pp. 141-152, 1964.

Jaeger, M. J. and A. B. Otis, Measurement of airway resistance with a volume displacement body plethysmograph, Journal of Applied Physiology **19**:813-820, 1964..

King, F. A., L. Roberts and R. L. King, Visual and auditory learning in squirrel monkeys with restricted lesions of frontal and occipital cortex, Federation Proceedings **22**:514, 1963.

Ooyama, H. and E. B. Wright, Activity of potassium mechanism in single Ranvier node during excitation, Journal of Neurophysiology **25**:67-94, 1962.

Otis, A. B. and M. J. Jaeger, Effects of compressibility of alveolar gas on dynamics and work of breathing, Journal of Applied Physiology **19**:83-91, 1964.

Otis, A. B., Quantitative relationships in steady-state gas exchange, in W. O. Fenn and H. Rahn (eds.) *Handbook Of Physiology, Respiration I,* Williams and Wilkins: Baltimore, pp. 681-698, 1964.

Smith, O. R., R. L. King, R. F. Rushmer and T. C Ruch, Techniques for determination of cardiovascular response to exercise in unanesthetized monkeys, Journal of Applied Physiology **17**:718-721, 1962

Stainsby, W. N. and A. B. Otis, Blood flow, blood oxygen tension, oxygen uptake and oxygen transport in skeletal muscle, American Journal of Physiology **206**:858-866, 1964.

Stainshy, W. N., Autoregulation in skeletal muscle, in P. Johnson (ed.) *Symposium On Autoregulation Of The Blood Flow,* Circulation Research 15: Supplement I, pp. 39-45, 1964.

Wright, E. B. and T. Tomita, Separation of the sodium and potassium ion carrier system in the crustacean motor axon, American Journal of Physiology **202**:856-864, 1962.

Department of Psychiatry

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The conviction that the fullest understanding and treatment of man is based upon his conception as a biological and social individual living in a social matrix has been basic to the research effort in the Department of Psychiatry since its inception in 1958. In every phase of the research, teaching and clinical service activities, an attempt has been made to utilize the knowledge and approaches of social psychiatry and the behavioral sciences, together with those of genetics, physiology, psychoanalysis and individual psychopathology. Our goal remains that of gaining increased understanding of the many factors which contribute to health or result in illness in order to promote positive health, improve treatment of illness, and provide increasing excellence in the education of physicians. Beginning with an initial staff of four psychiatrists and one behavioral scientist in 1958, the Department has now grown to include 15 psychiatrists and 8 behavioral scientists specializing in the fields of biology, genetics, psychology, anthropology, biochemistry, sociology, and theology. Thus, over a six year period there has come into being a truly interdisciplinary group of basic scientists and clinicians who can investigate social and biological factors in the growth and development of an individual in his social setting.

Parallel with the growth in personnel has been the need for increased laboratory and clinical space as well as sources of funds to support the research effort. An increasingly critical and limiting problem of space has recently been partially alleviated by the use of temporary quarters. The department has, however, been fortunate in obtaining funds from numerous agencies, foundations and individuals. Outstanding research support has been obtained through grants from several of the National Institutes of Health and the U.S. Air Force Office of Scientific Research. In addition, support has been obtained from the Florida Council on Training and Research, the Foundations' Fund for Research in Psychiatry, and the Florida Alcoholic Rehabilitation Program. The University of Florida College of Medicine has provided general research grants including medical student research scholarships made up of contributions from the Public Health Service, National Science Foundation, Florida Heart Association and Florida Cancer Society. These research grants have been awarded to members of the Department of Psychiatry in recognition of the excellence and promise of their work.

Basic Science Research

The following summaries and the final references will sketch the range, stages of completion, and major investigators in the research within this department to date. First, let us consider the basic science aspects of the Department's research:

BIOCHEMISTRY.—Physiological and behavioral correlates of catecholamine patterns have been carried out with an intensive research program on the effects of various stress situations (for example, surgery, electroconvulsive therapy) on the intermediary metabolism of catecholamines, norepinephrine and epinephrine having been completed. The problem of methodology, which was crucial during the initial phase of this program, resulted in a solution which itself presented a significant contribution to the literature by providing a method now being applied in other laboratory centers throughout the country. Currently, a correlation between changes in catecholamine metabolism and cardiovascular and behavioral changes in man is under way (Aaron H. Anton, Ph.D.).[4, 5]

PHYSIOLOGY.—Several facets of physiological research have been embarked upon and rapid progress has been made in several areas. Detailed studies of the electrophysiological correlates of consciousness have been conducted, with the completion of studies on 871 college students, and current studies of sleeping patterns of normal subjects using the electroencephalogram to monitor the sleeping state, as well as transducers to measure skin temperature and body movement. Experimental arousal patterns are also being studied using graded signals and measures of the subject's response to assigned tasks upon arousal from vari-

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ous stages of sleep (Robert L. Williams, M.D.).[23-25]

Psychophysiology.—In very early phases of pilot investigation are studies on the psychophysiological aspects of aggression in patients and control subjects, with efforts under way toward determining the nature of behavioral and physiological responses of individuals exposed to an aggression-producing situation (G. W. Barnard, M.D.).

Neurophysiology.—Research has been extended into projects on the memory storage process in normal and brain-damaged individuals using simultaneous auditory stimulation techniques, already suggesting changes in concepts of cerebral dominance, information storage, attending and stimulus transmission (Paul Satz, Ph.D., Evan G. Pattishall, Ph.D., M.D.).

Basic Psychology and Information Processing.—Research identifying and analyzing fundamental differences in the acquisition and use of information by normal, psychoneurotic and psychotic individuals has revealed a generalized inefficiency in the processing of information by neurotics, while psychotics show a gross loss of information from the environment which is especially pronounced when information is conveyed by praise or blame (James L. Dowis, Ph.D.).[10]

Genetics and Biology. — Studies on the inherited patterns of neuromuscular behavior are being studied in the laboratory using a spectrum of animals from the simplest up to and including the human, in the inpatient and outpatient clinical services, by relating ethology to psychoanalytic concepts of development. Emphasis is placed on motor patterns and cellular structure as they change from species to species and includes the comparative behavior of "mothering" behavior in birds, primates and human beings (Sol Kramer, Ph.D.). Genetic studies, from the standpoint of genetic mechanisms which may cause or condition mental disease, include those on patients whose family history, personal biography and physical or functional characteristics suggest a genetic etiology, while experimental animal work is concerned with individual and strain differences in any important behavior centering on pleiotropic cerned with individual and strain differences in rat (Marshall Bush Jones, Ph.D.).[13,14]

Clinical Research

Clinical research studies, which of necessity have had to await the development of the clinical services, are sketched in the following paragraphs:

Automated Clinical Information System. —In process since the beginning of the Department's clinical activities has been an effort to develop a system which permits centralizing the information gathered from physical, psychological and sociological phenomena in our clinical and research settings. The initial phase is nearing completion and will permit the addition of clinical information to research information so that it will be readily available for the analysis of individual research findings, for cumulative and program research, and for correlation between clinical findings, treatment outcome, and research observations (John D. Ainslie, M.D., George W. Barnard, M.D., R. Dean Coddington, M.D., James L. Dowis, Ph.D., and H. W. Hutchinson, Ph.D.).[7]

Child Psychiatry.—The meaning to the child and parent of congenital heart disease has been examined in detail (Daniel R. Offord, M.D., and Joel Stein, M.D. and J. F. Aponte). Studies on the relationship of parental authoritarianism to the severity of a child's emotional disturbance were reported at the American Psychiatric Association's annual meeting in 1964 (Paul L. Adams, M.D., John J. Schwab, M.D., and J. F. Aponte). Another study has been completed on preschool sociopathy and working mothers (H. Nathan, M.D., under the direction of Paul L. Adams, M.D., and Marshall B. Jones, Ph.D.). Ongoing studies include those on bisexual conflicts as related to school phobias, (Paul L. Adams, M.D., and Nancy MacDonald, M.S.W.) and religious concepts of children (Frank Carrera, M.D.).

Adult Psychiatric Inpatients: — Detailed characteristics of inpatients and their course in the hospital have been carefully collected in a systematic form (James L. Dowis, Ph.D.), the patient population and demographic distribution studied (H. W. Hutchinson, Ph.D.), and characteristics of the communities to which they return are under way in order to evaluate the effectiveness of treatment procedures. A detailed study of the effect of the ward treatment program of milieu therapy on the schizophrenic patient has been completed (W. C. Ruffin Jr., M.D., D. Coggins, M.D., and James L. Dowis, Ph.D.).[18] A specific treatment approach, that of utilizing groups of patients, relatives, nuclear family, or multiple families together is now being evaluated in terms of the outcome of inpatient treatment (John Cluxton, M.D.). Psychological studies on the psychodynamic origins of guilt and shame are being explored through the use of objective tests con-

structed to measure moral orientations and studies of theoretical psychological mechanisms such as parataxic distortion and transference (D. T. Wilson, Ph.D.).

Consultation-Liaison Studies.—The interface between psychiatry and medicine is historically unclear and hazy. The theoretical background rests primarily on precepts derived from anecdote and impression, gained by the slow, individual accumulation of clinical experience. This entire field is being investigated by a series of systematized and controlled studies in order to provide a background of documented data for psychiatric consultation work with medical inpatients and liaison activities with nonpsychiatric physicians. These studies are grouped into four major categories: (a) Procedures and processes, including the differential characteristics of the patients, reasons for late referral, problems in diagnosis, and the accurate identification of the patient needing one consultation. (b) Patients' reactions to consultants and referring physicians and the effects of psychiatric consultation, by follow-up. (c) Patients' attitudes towards hospitalization, their physicians, and their illnesses. (d) The applicability to medical inpatients of traditional psychiatric concepts such as depression, anxiety, and body image (R. S. Clemmons, M.D., J. J. Schwab, M.D., and L. Marder, M.D.).[19,20]

The correlation between pre-existing personality variables of psychiatric or psychosomatic illness in gynecologic patients prior to surgery and at follow-up is under continuing study (E. G. Newman, M.D., C. Buchanan, M.D.).[15]

Clinical Psychopharmacology. — Adult Outpatients.—Since its inception in February 1961, a simple double-blind controlled method of practical use for the clinical evaluation of psychoactive drugs in outpatients has been under investigation. Tranquilizers and antidepressants are used when clinically indicated and the effectiveness of the methodology employed has been demonstrated such that significant differences have already been found between the use of placebo and the use of active preparations. Three publications are in press describing the results of such studies and include the contribution of a method of practical use to clinicians as well as contributions to the basic understanding of placebo effect and suggestibility (John D. Ainslie, M.D., J. F. Stiefel, M.D., Marshall B. Jones, Ph.D., and R. M. Steinbook, M.D.).[2]

Community and Social Psychiatry.—Under way are epidemiological studies on psychiatric illness at the Florida State Prison, which can be viewed as a closed community, relative to the incidence and prevalence of mental illness as well as the effect of the setting itself on new inmates. In cooperation with the Child Welfare Division of the State Welfare Department an effort is under way describing the natural history of some of the behavioral disorders of childhood, as well as the effect of parental separation on the child and the best way of utilizing foster home placement (Rufus M. Vaughn, M.D.). Collaboration is also maintained with a large study on the epidemiology of mental illness in a university student population (H. C. Schumacher, M.D.). The value of psychiatric consultation in a state hospital follow-up program in a county health department has demonstrated this to be of significant value in consultee-centered consultation with public health nurses as reflected by increased accuracy and rapidity in the care of patients and of their return to a rehabilitated state (John D. Ainslie, M.D.).

Anthropological and Sociological Studies.—Sociocultural methodology is being used in both the inpatient and outpatient services to study the patient-family, patient-patient and patient-staff interaction patterns; some of the same methodology is being applied to the study of the social and psychological relationships between medical students and phychiatric patients relative to the problems of role conflict, mutual understanding of problems, and each participant's definition of concrete interaction (H. W. Hutchinson, Ph.D., Evan G. Pattishall, Ph.D., M.D., D. T. Wilson, Ph.D.).

Clinical Techniques and Devices.—A study has been made of visual aids in the treatment and education of patients on the inpatient service (W. C. Ruffin Jr., M.D., L. L. Linden, Ph.D.), and a specific test utilizing three-dimensional objects has been developed to test stereognosis in relation to possible cortical deficit (E. G. Newman, M.D.).

Medical Education.—Research continues to sharpen, refine and expand the primary mission of this Department, namely that of the teaching of psychiatry. Accordingly, research into the process and effectiveness of medical education itself has become an integral part of the departmental effort. An active and comprehensive study assessing the personal and academic aspects of medical students is under way, starting with the medical

student applicant and continuing throughout his medical training. This has now extended into an analysis of the characteristics of medical school drop-outs. Many smaller topics are under study, such as that of the attitudes of medical students toward the care of patients with chronic illnesses.

In order to help the student doctor-to-be to develop his maximum potential, an assessment is under way of the characteristics of a successful medical student. One of the most difficult and neglected areas of training research has been that on the training of clinical skills in medicine: one approach currently well under way is the collection and analysis of critical incidence of meaningful learning experiences which medical students encounter during their third year clinical clerkships. Cooperative studies are under way between the Department of Psychiatry and several other departments in the medical school, and include a focus on the medical student's role expectation and its influence on learning, the doctor-patient interview relative to developing evaluative criteria for assessing communication skills, interpersonal relationships and their effect on patient care, and the process of history taking and arriving at a diagnosis. Finally, the Department is cooperating in a national study attempting to develop measures for the evaluation of the many clinical skills which are involved in the teaching of comprehensive medical care (Evan G. Pattishall, Ph.D., M.D., H. W. Hutchinson, Ph.D., Marshall B. Jones, Ph.D., E. V. Smith, Ph.D., D. T. Wilson, Ph.D., James L. Dowis, Ph.D.).

Relationship of Research to the Primary Mission of Teaching

The research program undergirds and provides expanding horizons for the teaching program of the Department. Combined research and training programs include career teaching fellowships which have been held by two department members, J. S. Schwab, M.D., and Leon Marder, M.D. In order to promote the full understanding of man as a complete biosocial individual, the first postdoctoral training program for behavioral scientists in a department of psychiatry has been initiated, and four postdoctoral fellows have spent full time in the Department: Paul Satz, Ph.D., B. E. Goocher, Ph.D., Sidney Denman, Ph.D., D. F. Hobbs, Ph.D.

The force which effectively continues to unite the teaching service and research areas of this Department is the individual patient himself, with the focus being on the individual in his social matrix. From this firm nuclear point of focus, the departmental activities radiate and expand. The training of the medical student is enhanced by the research findings which are fed back into his training program; the treatment of patients is enriched by the increasing skills and efficiency of the better trained medical student, and more specific treatment methods resulting from definitive research; finally, the postgraduate psychiatric program provides for the training of skilled specialists in psychiatry who not only function as therapists in the patient-doctor relationship, but can also assume their responsibility as social agents and leaders among the various health professions in the field of mental health.

References are available from the authors upon request.

Department of Radiology

George A. B. Cowan, M.D.*
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The Department of Radiology of the University of Florida was organized in 1958 into three clinical divisions: (1) diagnostic radiology, (2) therapeutic radiology, (3) nuclear medicine; and two basic science divisions: (4) radiation physics, and (5) radiation biology. The research activities in the Department are heavily concentrated in the two latter divisions but much of the work crosses the traditional boundaries and can best be discussed under four general headings.

I. Computers in Radiology

In the past 20 years the use of computers has increased rapidly until now they are regarded as essential operational elements in business, science, industry and medicine. Recent developments indicate that large departments of radiology will soon require access to computer time for help with all of their business operations and some of the professional activities. Examples of such activities include information retrieval, data classification, probability predictions, mathematical computations, simulation of experiments, optical scanning of x-ray films, automatic programming of processes (such as chemical development of films), data processing of reports, billing, computer diagnosis, simulation of optimal schemes for patient processing, film flow, et cetera. The complexity of each of these areas is such that no single department is likely to produce effective research in all aspects. The nature of computer programming, however, is such that what proves effective for one group of workers is usually found to be of value to all other workers with similar problems. For the past four years a continued program of research in certain areas of computer applications has been in progress; these are described:

A. Computer Aids in Treatment Planning—(Dr. Mauderli, Dr. Cowan, Dr. Million and Mr. Fitzgerald).—Prior to x-ray treatment of a patient with cancer, his disease and the radiation modalities available must be correlated. The location and size of the tumor, radiation quality, beam sizes, and other variables must be studied and selected before therapy is instituted. On the basis of the dose distribution data available for a single field, computations have to be carried out to find the dose distribution which represents the total of the additive fields. This procedure previously was carried out manually and required much time, depending on the number of fields employed, the experience of the radiotherapist, his armamentaria and goal as to cure or palliation. The result was that only a restricted amount of dose information could be obtained within the limitations imposed by the number of available personnel and patient load. A program was written for automatic calculation by the University of Florida IBM-709 computer of the dose distribution throughout any one of a large number of possible treatment situations. During the past year all complex treatment plans have been carried out on the computer. The program has already been made available to 15 institutions in the United States, Canada and Europe. Expansion of our library of automatically calculated treatment plans is currently continuing with the introduction of wedge filter, multiple beam techniques and other sophisticated types of treatment. Our work, together with the interstitial radium treatment plans of the M. D. Anderson Tumor Institute, and multiple field techniques of other workers make it likely that within a very short period of time all treatment planning will be carried out automatically using programs at institutions where computers are available.

B. Computer Programs for Medical Diagnosis (Dr. Williams and Mr. Fitzgerald).—Most scientific investigators and all science editors have an insatiable thirst for new information and new theories. In medicine, these investigators have been so successful that those in clinical practice are exposed to an ever increasing flood of information. The work now being carried on in this Department in the application of computers to medical diagnosis is an attempt to make accessible to the practicing clinician the vast information which is potentially, but not always actually, available to him. A computer program employing

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a conditional probability model for the diagnosis of thyroid dysfunction was applied to a sample of 500 new cases of suspected thyroid disease. Analysis of errors in the diagnosis of hypothyroidism, euthyroidism, and hyperthyroidism led to modifications which eventually resulted in correct classification of 486 out of 500 cases (97%). Further sub-routines were written to correct seven of the 14 errors. Extensive modifications of the program have also taken into account the effect of various drugs on specific laboratory values and to print out the incidence of thyroid carcinoma and other types of morphological abnormality. After the correct diagnosis of each case, every entry on the original data sheet is added to the basic data matrix so that the program accumulates "experience." The program is believed now to be capable of diagnosing the great majority of the functional abnormalities of the thyroid gland. Future additions will include an expanded classification to take into account the rarer disorders of thyroid metabolism (such as the congenital goitrous cretins, abnormalities of the thyroid-binding globulins, et cetera). The basic data matrix has now reached the level of 1,500 cases. This program has been requested by 20 institutions on three continents.

C. Other Computer Applications.—Currently research is under way to adapt the Lodwick bone tumor diagnosis program, the Warner congenital heart disease program, and the Caceres scalar ECG and the Pipberger vector ECG programs to the University of Florida IBM-709 instrument (Dr. Williams and Mr. Fitzgerald). Efforts are also under way to initiate a diagnostic program for brain scans (Dr. Cowan and Mr. Fitzgerald); bone dyscrasias (Dr. Agee and Mr. Fitzgerald), and radioactive Hippuran renograms (Dr. Williams and Mr. Fitzgerald).

II. Radiation Physics

(Dr. Mauderli)

Among the research activities in the division of radiation physics are the following: (1) An instrument has been developed and built for measuring in a water phantom details of dose distribution, considered essential to good treatment planning. The apparatus automatically makes and records some 3,000 measurements of the dose distribution in an x-ray field in five to 10 minutes. (2) A subminiature solid state electrometer amplifier has been developed for the special purpose of measuring the extremely small currents from ionization chambers which are used in radiation dosimetry. (3) A self-contained probe has been developed for convenient measurement of dose distributions within patients having intracavitary radium applications. The main advantages of this instrument lie in the fact that it is small and light, and that the reading instrument is an integral part of the probe, making it unnecessary to have external cable connections between the ionization chamber and readout unit. (4) Solid state electrometer amplifiers are under construction for the measurement of oxygen tension in tissue. (5) A precision dosimeter has been developed for routine use with the 2 Mev. Van de Graaff unit. (6) A fully automatic dosimetry system has been developed and is presently under construction to be used with the new Co-60 Teletherapy Unit. The features of this system are its automatic correction for the decay of Co-60 and of the dose-rate as a function of the field size. The dose to be delivered to the patient is conveniently selected on a key-board. (7) A device is in he planning stage for the automatic reproduction of effective patient cross sections. In the case of treatment of intrathoracic tumors, the normally used depth dose data (measured in a water phantom) have to be corrected because of the difference between air-containing lung on the one hand and other soft tissues and bone on the other hand. As a basis for such corrections, transit-dose measurements are carried out on the patient.

This device will allow an automatic drafting of the effective patient cross section (based on the radiation absorption properties), which is different from the actual physical cross section.

III. Radiation Biology

(Dr. Dunavant)

A major part of the present research activities revolves around a Whole Body Counter. This is a gamma radiation detector capable of accepting samples as large as an adult human subject. The counter is unique in that it uses two types of scintillation detector, (1) a large 2 pi liquid scintillation detector (110 gallons) and (2) a large (solid) sodium iodide crystal detector. Investigations in which the instrument is presently utilized fall into three general categories: (1) biological half-life studies of radionuclides, (2) clinical applications, including lean muscle mass determinations by measurement of the body's natural radioactive potassium, and (3) measurements of the current environmental levels of radionuclides, particularly radioactive cesium. Another study cur-

rently under way involves the comparison of 4 pi liquid and plastic scintillation detectors. These detectors were designed in this Department for use in the measurement of gamma radiation from experimental animals and for vascular clearance-time studies of human subjects by measuring circulating radioactivity in the arm. Other projects include (1) the development of an analytical technique for measuring low levels of radioactive Argon (A^{41}) by using low temperature adsorption and gamma scintillation spectrometry; (2) sodium and potassium distribution and excretion in the hypothyroid rat; and (3) evaluation of the effectiveness of various procedures in reducing the amount of radionuclides in the human dietary chain. The radionuclides involved in this study are radioactive cesium and strontium.

A basic research project currently under way (Dr. Cromroy and Dr. Cowan) concerns the use of microelectrodes for the measurement of oxygen tension in living systems. The purpose of this is to study the mechanisms of chemical protection against ionizing radiation and the basic effect of radiomimetic drugs. The reason for these studies is the quest for information on the mechanism of the "oxygen effect" in radiotherapy and the combined effect of ionizing radiation and hyperbaric oxygenation.

IV. Diagnosis and Treatment of Secreting Tumors

(Dr. Williams)

It is now known that there exists a large number of tumors of endocrine origin which produce a characteristic complex of signs and symptoms by an overproduction of specific hormones. Examples of these and the hormones involved are: hyperfunctioning adenoma of the thyroid (thyroxin), parathyroid adenoma (parathormone), islet adenoma (insulin), adrenocortical adenoma (aldosterone), pheochromocytoma (epinephrine, or norepinephrine, or both), and malignant carcinoid (serotonin). Recently another tumor has been added to this list—neuroblastoma, in which very large amounts of certain neurohormonal intermediates are formed and metabolized. Dr. Williams has continued a long term interest in the pathologic physiology of the aromatic amines by working out methods for the identification of the terminal urinary aromatic acid metabolites of the catecholamines dopamine and norepinephrine. In neuroblastoma, elevated production by the tumor of dopamine and norepinephrine results in increased urinary excretion of homovanillic acid and vanilmandelic acid in a majority of cases. The urinary excretion of these acids has important prognostic and therapeutic implications in cases where abnormal excretion of the metabolites continues after one or more modalities of treatment (surgery, x-radiation, chemotherapy) has been used. Methods have also been worked out for the diagnosis of pheochromocytoma and malignant carcinoid. Current work is concerned with the evaluation of gas chromatographic methods for the determination of urinary melatonin and 6-hydroxymelatonin in patients with pinealoma, a rare brain tumor.

Correction

On page 643 of the September issue of The Journal, the name of the second co-author of the scientific article entitled "Skin Antisepsis Five Year Evaluation" was incorrectly published as "Harry S. Goldstein, M.D." This author's name should have appeared as Harold S. Goldstein, M.D. The Journal extends sincere apologies to Dr. Goldstein for this error.

Department of Surgery

E. R. Woodward, M.D.
GAINESVILLE

The Department of Surgery at the University of Florida College of Medicine was established in the fall of 1957, approximately one year prior to the opening of the Teaching Hospital. The Department was organized by the establishment of divisions, representing the major fields of specialization in the various surgically related disciplines of clinical medicine. Attention was first directed to the organizing of personnel and facilities for the surgical care of patients in the Teaching Hospital and to the development of clinical teaching programs for medical students, interns and residents. As each clinical unit was activated, however, there were developed simultaneously research activities appropriate for the clinical interests of the faculty in the specialty.

Research in the Department of Surgery is supported largely through extramural grants to individual faculty members for specific projects. In addition, the Department supports an experimental surgery suite fully equipped and staffed for aseptic surgical procedures on animals. Parenthetically this area serves also as the focal point for the teaching of basic aseptic principles to student nurses, medical students and surgical technician trainees. The Department of Surgery has also been instrumental in the planning and construction of a farm facility for the housing of large animals used in long term experiments.

Research in the Division of Anesthesia

J. S. Gravenstein, M.D., Professor and Chief

Many patients come to the operating room not only with their surgical illness, but suffering from endocrine, metabolic, cardiovascular, pulmonary and iatrogenic diseases. Research activities carried out by the staff, fellows and students in the Division of Anesthesia reflect the diversity of the challenges which anesthesiologists meet in the operating room and the recovery and intensive care area.

Anesthetic effects on cell membranes were studied in the human erythrocyte. The membranes of normal red cells pump sodium ions out of and potassium into the cell. Since the very nature of anesthesia may be related to an action on cell membranes, we measured the ability of the cell membrane to deal with sodium and potassium in the presence of different local anesthetics. Clinically used concentrations of local anesthetics were found to be potent inhibitors of the active transport of sodium and potassium. The local anesthetics also increased the leakiness of red cell membranes (N. B. Anderson and J. S. Gravenstein). Inhalation anesthetics had a similar effect on the ion transport in paramecia (Webster and Gravenstein), frog skin and toad bladder (N. B. Andersen). This membrane effect may be related to certain clinically important side effects of anesthetics. The increased leakiness relates well to the irritating action of local anesthetics on tissue in general.

Cyclopropane and cardiac glycosides were studied in aortic strips of rabbits and both were found to enhance the response of these strips to epinephrine (Torsten W. Andersen and Gravenstein). This observation correlates well with the effect of cyclopropane on the nictitating membrane of spinal cats, where cyclopropane markedly potentiated the action of epinephrine (Gravenstein, Sherman and T. W. Andersen). Even in man this vasopressor potentiating effect can be demonstrated for cyclopropane, whereas halothane depresses the response to sympathomimetic drugs (T. W. Andersen, Perkins and Gravenstein).

These studies in patients led to an evaluation of the vasopressors used by us experimentally. The literature provided conflicting opinions. In a comparative study in volunteers we found mephentermine to be a potent vasopressor which caused a marked increase in peripheral resistance in contrast to ephedrine, equally effective in raising pressure, but without increasing resistance, that is, providing a greater cardiac output (T. W. Andersen and Gravestein).

Changes in total vascular peripheral resistance are not only brought about by direct actions of drugs but also reflexly. Thus small doses of both atropine and scopolamine decrease cardiac output

Professor and Head, Department of Surgery, University of Florida College of Medicine, Gainesville.

by slowing heart rate. This is not accompanied by a drop in blood pressure, because total peripheral resistance is reflexly raised. Larger doses of atropine and scopolamine will increase heart rate and cardiac output. This effect is again not accompanied by a change of blood pressure and therefore total peripheral resistance is lowered (Gravenstein, Andersen and De Padua). We ruled out a direct belladonna effect on the vascular tree by giving these drugs to dogs in which a complete heart block had been produced previously (Gravenstein, Schiebler and Bartley).

During studies with scopolamine we found an interesting and striking secondary bradycardia, that is, heart rates after scopolamine rose first but fell to distinctly bradycardic levels within 50 minutes after an intravenous dose. During these bradycardic episodes cardiac output was low (List and Gravenstein). These studies on cardiovascular pharmacology were complemented by investigations on isolated preparations of rat atria in which an interaction between thyroid, hormone, and catecholamines (Thier, Gravenstein and Hoffman), and between catecholamines, thyroid and adrenal steroids (Cravey and Gravenstein) was carried out. In these preparations and presumably in man the presence or absence of thyroid and adrenal steroids markedly affects the responsiveness of cardiac tissues to the normally occurring two catecholamines, epinephrine and norepinephrine.

In cooperation with Drs. Anton and Wheat, we evaluated the liberation of catecholamines during heart operations and cardiopulmonary bypass. Striking differences between ether and halothane existed, the former permitting, the latter inhibiting, sympathetic activity as measured by circulating and urinary catecholamine levels. The strong sympathetic stimulation caused by electroshock therapy also causes a marked, if brief, increase in circulating catecholamines (Gravenstein, Tetlow, Anton and Wiener).

In an entirely different study the teratogenic effects of inhalation anesthetics are tested on incubating chicken eggs (N. B. Andersen). This is at present largely of academic interest and may lead to studies on the structure activity relationship of the anesthetic versus the teratogenic properties of inhalation anesthetics. Whether or not clinical implications will develop from these investigations is not yet known.

Dr. T. W. Andersen has cooperated with the Department of Gynecology and Obstetrics over the past years in studies involving the effect of anesthetics and drugs such as oxytocin on the cardiovascular system of women undergoing cesarean section.

The studies in progress in the Division of Anesthesia now involve the metabolism of biogenic amines (Anton), the teratogenicity of anesthetics (N. B. Andersen), the transport of ions through living membranes under the influence of anesthetics in vitro (N. B. Andersen), and the interaction of hormones on isolated rat atria (Gravenstein) and in man, the cardiovascular effects of cholinesterase inhibitors (H. M. Perkins), and the interactions between anesthetics and cardiovascularly active drugs (T. W. Andersen).

General Surgery

Researches in this field have centered around studies of the physiology and pathophysiology of the upper gastrointestinal tract and represent the independent and collective efforts of Drs. Lester R. Dragstedt, Paul H. Jordan Jr., M. Michael Eisenberg and E. R. Woodward. A significant role has been played by a large number of surgical research fellows, both American and foreign. These fellowships provide research training for men intent on a career in academic surgery and are also utilized to provide basic science education as an integral part of residency training in surgery. Most studies have involved long term experiments in animals prepared by aseptic surgery with various pouches and fistulas of the upper alimentary canal.

Many of the investigations have involved the secretory and motor function of the stomach. Gastric motility is strongly inhibited by the presence of acid in the duodenum. Ablation of the sympathetic innervation of the stomach abolishes the inhibitory effect indicating it to be due to an axon reflex through the postganglionic sympathetics (Schapiro and Woodward). The effect of insulin on the stomach has been studied; a biphasic effect occurs with both motility and secretion. There is an initial inhibition of motility followed during the hypoglycemic period by return to normal motility (Schapiro and Woodward). The initial inhibition of gastric secretion has been found to be a function of insulin itself and not related to its effect on blood sugar (Eisenberg, Woodward, Quintana and Dragstedt). In another study, endogenous gastrin was found to be a mild stimulant of pepsin (Kreager, Quintana, Dragstedt and Woodward). Destruction of Meissner's plexus in the pyloric antrum blocks the gastrin mechanism indicating an essential role

in hormonal regulation of gastric secretion (Woodward, Park, Schapiro and Dragstedt). In a related study, experimental gastric ulcers have been regularly produced in rabbits by surgically induced pyloric stenosis (de la Rosa, Linares, Woodward and Dragstedt). A powerful synergistic effect between the nervous, gastric hormonal and intestinal hormonal phases of gastric secretion has been found, indicating a physiologically important interdependence in these mechanisms (Jordan and de la Rosa).

Other studies have been concerned with the stimulation of pancreatic secretion. Alcohol has been found to have no direct effect on pancreatic secretion but stimulates it indirectly through stimulation of gastric acid secretion which in turn enters the duodenum and causes secretin release. Furthermore, histamine has similarly been found to have no direct effect on the pancreas, but acts only through its stimulus to gastric acid secretion (Woodward, Walton and Schapiro). Topical application of anesthetic agents to the duodenum and jejunum has been found to inhibit markedly secretin release in response to the application of hydrochloric acid. This effect indicates that the submucosal parasympathetic plexus is probably important here as well as in formation of the hormone gastrin (Schapiro and Woodward). In another experiment antidiuretic hormone from the pituitary was found to have a profound inhibitory effect on pancreatic exocrine secretion (Perks, Schapiro and Woodward).

Recent efforts have evolved around an attempt to correlate the circulatory physiology of the stomach with its secretory function. A technic has been developed for the isolation of a portion of the stomach and its perfusion with a pump oxygenator. The ex-vivo pouch has been maintained in a viable state for six to eight hours and response to secretory stimuli demonstrated (Eisenberg, Schapiro and Woodward). In another current study, the influence of sex hormones on gastric secretion has been evaluated. Synthetic androgen was found to increase gastric secretion, but the effect of estrogenic hormone was less apparent (Eisenberg, Owens and Woodward). The influence of alterations in the hormonal milieu on experimentally induced peptic ulcer is now being studied.

Division of Neurosurgery

Lamar Roberts, M.D., Ph.D., Professor and Chief

Research in the Division of Neurosurgery is directed primarily toward two major long term goals. The first of these is an understanding of the operation of cerebrocortical mechanisms in complex perceptions, learning and memory. In approaching this problem small, restricted, bilateral lesions are created in selected areas of the cerebral cortex of monkeys and, following recovery from surgery, the ability of the monkey to perform adequately complex tasks requiring the use of different sense modalities, motor responses, and higher cerebral processes is evaluated. Other monkeys with chronically implanted brain electrodes in identical cortical sites are studied on the same tasks while electrical stimulation of the brain is being carried out. In this manner a behavioral analysis of cortical functioning is performed while comparing the effects of lesions with electrical stimulation. Results indicate that a lesion may produce a disruption of performance on a complex task depending upon the locus of the injury and the nature of the task. Unlike lesions, electrical stimulation may improve perception and learning as well as disrupt them. Which of these effects is achieved in any particular case depends upon the cortical area to which the electrical stimulus is applied, the kind of task, and the type and intensity of current used. Parallel human studies in which the cerebral cortex is stimulated and behavioral responses studied are also being carried out in conscious patients undergoing necessary intracranial surgery with local anesthesia.

The second major problem is concerned with recovery of function following severe brain injury. This project involves performing complete surgical transection of the brain stem in experimental animals and chronic maintenance of these decerebrate preparations over periods of weeks and months. Longitudinal studies of changes in electrophysiological and behavioral patterns as indicators of recovery of normal functioning in the isolated forebrain are performed. Electrical and pharmacological means of facilitating this recovery are attempted, and it is hoped that this work will result in a better understanding of neural mechanisms in consciousness and unconsciousness, and that new approaches will result that may be useful in facilitating arousal of patients from coma resulting from trauma.

Division of Ophthalmology

Herbert E. Kaufman, M.D.,
Professor and Chief

Research in the Division of Ophthalmology encompasses several major areas.

The pathogenesis and treatment of virus disease is being studied intensively. Having developed the first therapeutically active drug for topical virus infection. we have promising studies in progress which may lead into the development of drugs which are therapeutically antiviral but which are not systemically toxic. In addition, the ability to stop virus multiplication makes it imperative that we understand more about the pathogenesis of virus disease. Some symptoms occurring after virus infection depend on previous tissue damage; others depend on hypersensitivity response to virus product. Neither of these would be amenable to therapy by agents which halt virus multiplication, and the nature of specific virus disease must be determined. Related to this research are studies of the basic processes involved in the causation of uveitis and other types of ocular inflammation, and the development of better diagnostic technics to permit their ultimate therapy.

A second major research area involves the study of corneas for keratoplasty. Previously there have been no objective data on the influence of age on the cornea and the influence of specific diseases as they relate to the suitability of this tissue for use in corneal transplant. New methods of staining the cornea have been developed which stain the oxidative enzymes of the endothelium. Since the stroma of the cornea has very little metabolic activity, the endothelium can be visualized as a brightly staining sheet on the intact cornea without the necessity to make sections or to peel the tissue from the underlying stroma. This ability to examine the intact cornea without preparation artifacts permits, for the first time, an assessment of the suitability of donor tissue. The use of these enzyme stains also has permitted the development of a technic for preserving corneas for use in penetrating keratoplasty. Cells that are damaged in an attempt to preserve them, when incubated in tissue culture fluid, lose their oxidative enzyme as these enzymes leak out. This has served as a useful assessment for cellular integrity after freeze preservation, and a method of freezing cells down to -180 C. has been developed which preserves the corneal tissue alive and permits prolonged storage. This tissue will be investigated in an extensive study of keratoplasty in El Salvador.

Technics have been developed by Dr. Copenhaver and studies have been made of the electrical response of the brain to small visual stimuli. With the aid of specially designed computer equipment and frequency filters, the tiny electrical discharge of the cells in the occipital cortex responding to small visual stimuli can be separated from the remainder of the massive electrical activity of the brain. This permits, for the first time, the study of the electrical response of the brain to a variety of defined visual stimuli and the objective measurement and investigation of specific parts of the visual system in normal and diseased persons.

For the first time, it is possible to study objectively the details of the electrical response to vision by the brain. The integrity of the components of the visual system, visual fields, and visual acuity can be studied in normal persons and in patients with severe brain disease. Children, patients in coma, and patients with severe neurological disease can be investigated for the first time as to the normality of the visual system. Abnormalities in this system are important in the diagnosis of a variety of diseases and can be objectively evaluated. If the electrical correlates of vision are studied, it may ultimately be possible to simulate these and to produce artificially some vision in persons who are blind, just as it is possible to simulate the heart beat by an electrical pacemaker. A multidisciplinary laboratory with Engineering and Psychology is continuing this work and now trains graduate students and fellows in Engineering, Psychology, and Ophthalmology in this area of research.

Division of Orthopedic Surgery

William F. Enneking, M.D., Professor and Chief

The Division of Orthopedics at the University of Florida was activated on July 1, 1959, and the laboratory of orthopedic research was established January 1, 1960. Investigations have been carried out in the rejection mechanism of homogenous bone transplantation by histological means. The investigations have further been studied in depth employing extracts of bone to determine the location and nature of antigens in normal bone. Comparable studies have been carried out in human osteogenic sarcomas to compare the antigens in sarcomatous bone as opposed to normal bone. Some of the experiments have been performed in animals inducing osteogenic sarcomas in rabbits by the intravenous use of beryllium and comparing the antigenic characteristics of sarcomatous rabbit bone to normal rabbit bone. Precipitating antibodies induced heterologously from extracts of sarcomatous rabbit and human bone have been conjugated with fluorescent dyes and in

vivo distribution in sarcoma-bearing animals and human patients is determined by ultraviolet light microscopy.

The effect of temperature on healing fractures was stimulated by the observation that patients who are maintained for considerable periods of time under hypothermia following severe injuries appear clinically to have delayed healing of concomitant fractures. Poikilotherms (alligators and frogs) have been maintained at varying temperatures and the cellular differentiation showing defects in surgically induced fractures has been studied.

A bone-seeking antibiotic, tetracycline, has been combined with nitrogen mustard and the effect of this combination has been evaluated in the VX-2 carcinoma in rabbits. The suppressing effect of the agent on tumor growth has been studied, and localization of the drug within the tumor has been carried out by fluorescent technics.

Clinical studies have been conducted in the use of lyophilized human fibrinogen in the hematologic management of hemophiliac patients undergoing elective reconstructive surgery. Other studies have been conducted on the incidence of osteomyelitis in compound fractures and a third clinical study has been conducted into the value of routine culture of elective operative wounds. These investigations have been conducted under the direction of Dr. W. F. Enneking.

Studies have also been conducted on the potential use of the polarimetric determination of oxygen tension in bone in an effort to determine the viability of bone. Basic investigation into the cellular mechanism of homograft rejection has been pursued, employing tissue culture of sensitized lymphocytes.

Clinical investigation has been carried out in a family involved with familial hypophosphatemic rickets. These studies have been done by Dr. R. M. Fry. Current studies are being done by Dr. H. P. Hogshead in the production of Charcot joints in monkeys by selective joint denervation in an effort to provide an experimental model for future biochemical research. Experiments on the excretion of mucopolysaccharides, the identification of mucopolysaccharides in the urine of patients with chondrosarcoma, and the correlation of these findings with the mucopolysaccharide content of the lesions have been conducted by Dr. A. E. Lorincz.

Division of Otolaryngology
George T. Singleton, M.D.
Associate Professor and Chief

The research presently being undertaken in the Division of Otolaryngology is concerned primarily with hearing and vestibular function.

Basic mechanisms of hearing are being investigated by Dr. Teruzo Konishi. In his experiments the electrical resistance across the cochlear partition is measured in the normal animal and in abnormal situations such as those produced by alteration of electrolyte balance, by anoxia, or by mechanical displacement or disruption of the membranes.

In another experimental series, Dr. James C. Garlington is studying the effects of explosive decompression on stapedectomized animals. Both wire-fat and polyethylene-gelfoam prostheses are used and the animals are subjected to decompression which simulates that which might be experienced in a civilian jet-liner. Histological preparations will be studied and the two types of prostheses compared.

In the area of vestibular research, a group of animals has been labyrinthectomized both before and after habituation to caloric stimulation. The animals' postoperative disequilibrium, nystagmus, and general health are then compared. It was hoped that this information might indicate some value to the use of caloric habituation as a therapeutic tool in patients with vestibular disorders, but thus far our results appear to be negative.

In a related project, a series of human volunteers is being subjected to repeated caloric stimulation. Nystagmic reactions are recorded in order to determine if and when habituation occurs and to test its duration.

Random noise analysis technics are being applied to nystagmic responses elicited in normal animals and in those with known localized peripheral and central vestibular lesions. After digitization of the analog wave form of the nystagmus, the computer is used for the mathematical computations and print-out of the power spectral density curve and the autocorrelation curves. It is anticipated that this type of analysis will enable us to recognize specific lesions in patients.

Plastic Surgery
M. J. Jurkiewicz, M.D.,
Associate Professor and Chief

The Section of Plastic and Reconstructive Surgery is actively engaged in research in three

general areas: 1. congenital malformations; 2. wound healing; 3. transplantation.

1. A colony of dogs inbred for cleft lip and palate has been established over the past four years. Research on the genetics of cleft lip and palate in animals has been meager because the defect is considered to be lethal. The dog with such a defect, however, can be successfully raised to maturity albeit neonatal mortality rates are high. Sufficient animals have been raised to begin extensive experiments designed to test the hypothesis that the expression of cleft lip and cleft palate is influenced by a small number of multifactorial recessive genes.

2. Studies on the healing of wounds have been carried out over the past five years, particularly in regard to the wounds resulting from thermal injury. Protein deficiency and severe anemia have been incriminated as responsible for delay in wound healing and poor take of grafts. In rats burned 20% of body surface neither protein deficiency nor severe anemia per se has been found to exert a detrimental influence on wound healing by contraction or in the take of split-thickness skin grafts. Attempts are being made to quantitate the effect sepsis has on the healing of burns.

3. Homotransplantation research in humans currently emphasizes chemical suppression of the host immune response. Results have been discouraging. We have, therefore, adopted a new approach utilizing live immunologically competent homologous spleen cells to produce a state of tolerance prior to transplantation of homologous tissue in inbred mouse strains. Results suggest that homograft prolongation and perhaps permanent tolerance may be achieved by this method.

Division of Thoracic and Cardiovascular Surgery

Myron W. Wheat Jr., M.D.,
Professor and Chief

Three major areas of investigation have been approached in this division: cardiovascular hemodynamics; the ultrastructure of the myocardium in man and animal; and the evaluation of problems directly related to patients with cardiovascular and pulmonary disease.

1. Cardiovascular Hemodynamics

a. The cardiovascular physiology and angiocardiographic anatomy have been studied in normal and snorter dwarf cattle. The snorter dwarf cattle have an abnormality of mucopolysaccharide metabolism comparable to that seen in patients with Hurler's syndrome. The findings in cattle have been compared with those in children with Hurler's syndrome.

b. The hemodynamic effects of the acute induction of varying degrees of atrioventricular dissociation in dogs are being investigated. Cardiac output in a stable preparation at varying ventricular rates has been studied using indicator dilution techniques.

2. Ultrastructure

a. The identification of lysosomes in human myocardium has been carried out. These studies are being performed on myocardial tissue removed from along lines of incision at the time of open heart surgery. In addition, the relationship of the structure and number of lysosomes present in the individual myocardial cell is being evaluated relative to the type, severity, and duration of the congenital or acquired heart disease.

b. Left to right shunts at the atrial level in dogs have been created to duplicate the atrial septal defects seen in humans. The hearts of the dogs are then subjected to periodic biopsy to see if the ultrastructural changes seen in man can be reproduced under similar conditions in the experimental animal.

c. Varying types of cardiopulmonary bypass utilizing different methods for preserving myocardial viability during cross clamping of the aorta are being evaluated. Studies of the myocardial cells should indicate which type of total body and coronary artery perfusion best preserves the integrity of the cell and thereby places clinical utilization on a firmer basis.

d. The red blood cells during cardiopulmonary bypass gradually deteriorate. Studies of these cells at the ultrastructural level are under why to attempt to identify at what point in time and in what manner the red cell degenerates under the conditions of cardiopulmonary bypass.

e. Intracellular localization of digitalis in the myocardial cell has been studied utilizing ultrastructure autoradiography.

3. Cardiovascular and Pulmonary Problems in Patients

a. Different methods, particularly different blood diluents, of cardiopulmonary bypass are being evaluated.

b. Pulmonary problems involving resistant atelectasis in infants have been evaluated.

c. A number of clinical entities such as pulmonary valvar stenosis, single ventricle, congenital corrected transposition of the great vessels,

and aneurysms of the aortic root have been evaluated.

b. An investigation both in the laboratory and in the patient concerning a pharmacologic approach to the treatment of dissecting aneurysms of the aorta is under way.

e. The long term postoperative function of the Starr-Edwards mitral and aortic prosthetic valves is being evaluated by angiocardiographic technics.

Division of Urology

George H. Miller Jr., M.D., Professor and Chief

The Division of Urology was organized in October 1958 at the same time as the opening of the hospital, and the research laboratory in the Division was activated almost immediately. Over the ensuing six and one-half years the major effort has been a continuing study of various factors influencing urinary tract stone growth utilizing as the tool foreign body induced bladder stones in rats. The role of the foreign body itself, the influence of various infecting organisms, and a rather surprising effect of animal age on stone growth have all been studied and an attempt made to correlate the amount of stone production with chemical changes in the urine. Currently, studies are in progress in an attempt to evaluate the efficacy of phosphate administration as a preventer of stone formation both in the presence and absence of infection. These experiments are being correlated with related studies being carried out on patients with urinary tract calculi by Dr. W. C. Thomas Jr., in the Department of Medicine. The work described has been under the direction of Dr. George H. Miller.

A second group of experiments is currently under way involving perfusion of the isolated kidney with an oxygenator looking toward the temporary preservation of kidney function and subsequent transplantation. These studies are under the direction of Dr. David M. Drylie.

Department of Pediatrics

Andrew E. Lorincz, M.D.*
and Richard T. Smith, M.D.**
Gainesville

The Department of Pediatrics has a threefold role in the College of Medicine: (1) a clinical responsibility to provide quality consulting services for children in general pediatrics as well as a wide variety of pediatric subspecialties; (2) an educational responsibility for weaving into the medical school curriculum the principles and processes of normal and abnormal human development; providing postgraduate education for physicians desiring to specialize in pediatrics and subspecialties represents an additional educational responsibility; and (3) the establishment of a research program which delves into the basic phenomena and clinical aspects of a variety of developmental problems. This report deals specifically with the research program which has been designed to provide meaningful answers to problems of normal and abnormal developmental biology. A quality research program, it must be emphasized, requires an active clinical service which supplies the necessary patient material, as well as an educational program which provides the intellectual milieu favoring productive research.

The annual research budget of the Department exceeds a quarter of a million dollars, the greatest portion of which represents research grants from the National Institutes of Health and similar funds from private granting agencies. Departmental research activities extend from the acceptance of high school seniors and juniors into a summer scholarship program sponsored by the National Science Foundation to the presentation of research electives for medical students and the development of post doctorate trainees to levels of career medical investigators. Research in the Department has been recognized nationally in several ways: by the award of a senior fellowship from the American Philosophical Society to Dr. Donald V. Eitzman, and by the presentation of an NIH

*Associate Professor.
**Professor and Chairman.

career developmental award to Dr. J. B. Robbins, the E. Mead Johnson Award for pediatric research to Dr. Richard T. Smith, and the Bela Schick award for research in allergy to Dr. Elliot Ellis.

The scope of research in this Department is presented through brief outlines of studies which were in progress from 1962 to 1964, many of which are still active at the present time. For purposes of presentation, the researchers and their activities are divided into several major areas. The partial list of publications in the bibliography demonstrates that there is much interdepartmental and intradepartmental research activity being conducted by the various members of the Department.

Behavioral Research Studies

Investigators: Paul Adams, M.D., Associate Professor, Psychiatry and Pediatrics; R. Dean Coddington, M.D., Assistant Professor, Psychiatry and Pediatrics; Jack Evans, M.D., Assistant Professor and Clinic Director.

This group has been collaborating on studies of behavioral aspects of disease as disease processes affect behavior in the child, his family, and his community. Adams has focused his research interests on the investigation of the authoritarian attitudes of parents and effects of these attitudes on the behavior of their children, while Coddington has been primarily interested in evaluation of short term psychotherapy for the emotional complications associated with a number of disorders of childhood such as asthma, ulcerative colitis, and atopic dermatitis which have psychosomatic overlays. He, with Evans, has been collaborating on a second study—evaluating the influence of the physician's ability to communicate with parents and patients to the effectiveness of medical care. Evans has further been interested in the ecology of hospital infection and the organization of effective control methods and surveillance.

Research and Developmental Aspects of Infectious Disease in Immune Mechanisms

Investigators: Richard T. Smith, M.D., Professor and Chairman, Donald V. Eitzman, M.D., Associate Professor; J. B. Robbins, M.D., Assistant Professor; Elliot Ellis, M.D., Instructor; William A. Altemeier, Instructor and Special Trainee.

Research activity in this area has been focused in three directions. The phenomenon of immunological tolerance has been studied intensively and several fundamental principles have been established regarding the tolerance state. The main contribution has been the delineation and recognition of the importance of the antigen itself in the maintenance of the immunologically tolerant state. Robbins has studied the metabolism and fate of protein antigens in the neonatal period. He has established that although the newborn animal absorbs protein from the intestine readily, it is unable to catabolize it at the rate of older individuals of the same species.

Extension of the principles of immunologic tolerance to the human species is limited because of the experimental manipulation involved. Some insight, however, has been gained through Eitzman's studies of the higher primates. He has shown that the proportion of chimpanzees are susceptible to the induction of immunological tolerance in the newborn period and in addition that many of these newborn primates are surprisingly immunologically immature. In a parallel line of investigation, Eitzman has studied clinical tetanus neonatorum to examine the fate of foreign protein in the newborn human. Horse gamma globulin administered as tetanus antitoxin was measured quantitatively as it disappeared from the serum following therapeutic injection. It disappeared from the serum by an exponential function no differently from the chimpanzee and other animals which were ultimately shown to be immunologically tolerant.

The second major line of endeavor was the definition of the qualitative aspects of the neonatal immunological response. Smith and Eitzman showed that even the premature human infant was capable of marshalling a respectable immune response to the flagella antigens of gram-negative organisms. They further showed that in contrast to the adult human, the newborn produces macroglobulin antibody exclusively. The adult produces the macroglobulin antibody followed very closely by the appearance of 7S gamma-2 globulin antibody directly against the same determinant group. It has also been shown that a new variety of antibody, incompletely characterized as yet, appears in the adult and late in the neonatal period which has characteristics intermediate between macroglobulins and 7S gamma-2 globulins in respect to molecular size but with identical specificity.

A third line of work includes clinical studies on defects in immunological capacity of a variety of patients with decreased resistance to infection.

Eitzman characterized for the first time a defect in macroglobulin synthesis in the patients with Aldrich's syndrome. Patients have also been studied with a wide range of immunological defects, from the absence of specific immunoglobulins to the total absence of all immunological functions associated with a rudimentary thymus. This provocative group of patients offers multiple opportunities to understand fundamental aspects of the immune mechanism through the insights gained and the stimulation of clinical experience.

Ellis has studied in detail and characterized for the first time the heterophile antibody of infectious mononucleosis. He has also conducted studies on the role of the spleen in immunity and in particular its role in defense against infection during early development. Allergic reaction to rattlesnake venom is another area of interest in which clinical and immunological research is being conducted. An atmospheric pollen and mold survey of the Gainesville area has been in progress for the past two years.

Altemeier has been studying the sequential formation and quantitation of immunoglobulins formed by the rabbit after primary stimulation.

Genetic and Biochemical Studies

Investigator: H. A. Pearson, M.D., Associate Professor (Pediatric Hematology).

Pearson's major research interest is in the genetic aspects of hematological diseases exemplified by the hemoglobinopathies and thalassemias. These studies led to the first demonstration that the binding site of chromium^{51} to hemoglobin is to the beta polypeptide chains of Hemoglobin A. Family studies have provided a unique opportunity for localizing certain gene relationships on the human chromosome.

Connective Tissue Metabolism and Mental Retardation

Investigator: A. E. Lorincz, M.D., Associate Professor.

Lorincz's research is centered on biochemical investigations of connective tissue particularly in the heritable disorder of connective tissue metabolism associated with mental retardation such as Hurler's syndrome, metachromatic leukodystrophy and homocystinuria. In collaboration with W. C. Callahan in the Department of Anatomy, Lorincz has shown a specific electron micrographic lesion in the liver of individuals affected with Hurler's syndrome and possibly an analogous situation in Snorter dwarf cattle.

Lorincz has developed a gas chromatographic technique to study some of the sugars which are components of acid mucopolysaccharides. This new technique should assist materially in the characterizations of the multiple clinical entities which appear to have defects in connective tissue metabolism such as those previously listed as well as heritable multiple exostoses, nail patella syndrome, and Morquio's disease, which are not associated with mental retardation. Lorincz with Drs. Strasser, Fred Smith and William F. Enneking, Department of Orthopedics, is studying the acid mucopolysaccharide content of human bone in normal and pathological conditions. Another series of investigations in collaboration with the Department of Anatomy is in progress, which is centered about the glycoprotein content and physiological role of these substances in the poison apparatus of various animal species, including the pit vipers and octopus.

Clinical Significance and Characterization of Defects in Neurohumoral Mechanisms

Investigator: M. Greer, M.D., Associate Professor.

Greer has been concerned with the definition by urine and tissue analysis of the aromatic amines and their metabolites in a variety of neurological diseases with particular emphasis on neuroblastoma. In the analysis of these compounds, he and Dr. C. M. Williams, Department of Radiology, have extensively employed new methods of gas chromatography, a major technical breakthrough in the qualitative and quantitative measurement of these compounds. This work has permitted the rapid and specific diagnosis of neuroblastoma, ganglioneuroma, and certain other disorders involving the autonomic nervous system.

Developmental Aspects of Metabolism and Nutrition

Investigator: William Weil, M.D., Professor.

From an interest in juvenile diabetes Weil has been studying the effect of total caloric deprivation on the metabolic process. Preliminary results suggest that this approach is not as widely applicable in the growing child as it may be in the adult, but it may have some applicability in some highly controlled circumstances. In other studies he has attempted to evaluate the effect of modification of early animal nutrition on longevity, disease patterns, and physiological functioning of these animals during their growth periods. In effect, this is the study of early nutrition on the aging process. The possibility that

early disease, nutrition, or other physiologic processes determine in a predictable way disease patterns later in life and longevity has engaged several members of the Department recently.

Perinatal and Neonatal Physiology

Investigators: D. V. Eitzman, M.D., Associate Professor; I. H. Gessner, M.D., Assistant Professor; L. J. Krovetz, M.D., Associate Professor; G. L. Schiebler, M.D., Associate Professor; D. R. Shanklin, M.D., Associate Professor.

This joint investigative endeavor with the Department of Obstetrics centers around better understanding of the adaptive mechanisms involving the heart and lungs in the birth process. This group of investigators has developed techniques for simultaneous measurement of uterine and fetal blood flow which permits simultaneous samplings during the birth process. These studies are necessarily slow and limited in their scope; therefore, they have utilized the primate facilities to extend these observations in higher primates during various phases of pregnancy which cannot be done in the human.

In addition, Gessner has studied the effects of varying blood flow patterns on the early development of the chick embryo heart. By a technique of micromanipulation, he has been able to redirect flow in the cardiac tube of the developing chick and produce predictable congenital heart lesions. These studies also have established that the cardiac tube is surrounded by a pliable gelatinous material called the cardiac jelly. Together with Lorincz, Gessner has isolated the polysaccharide material from the cardiac jelly of the developing chick and characterized it as an acid mucopolysaccharide sulfate. This observation may provide some insight to the teratogenic effects of adrenal steroids and vitamin A.

Shanklin has been investigating other aspects of adaptation of the newborn to extrauterine life, with particular reference to hyaline membrane disease. He has developed evidence for the role of pulmonary edema in the pathogenesis of hyaline membrane disease. He has worked on an experimental model for this disease which allows testing of a number of variables, including hyperbaric oxygen and histamine, in the pathogenesis of this disorder.

Developmental Aspects of Cardiovascular Physiology

Investigators: G. L. Schiebler, M.D., Associate Professor; L. J. Krovetz, M.D., Associate Professor; Thomas G. McLoughlin, Instructor and Special Trainee.

These laboratories have been involved in a number of aspects of cardiorenal and cardiovascular physiology. In collaboration with the Department of Physiology, Schiebler has performed a series of hemodynamic studies in living animals in order to evaluate the physiological effects of complete atrioventricular block. This clinical problem has achieved considerable importance as a direct outcome of successful cardiovascular surgery for congenital heart lesions and the results have important implications in the operative and physiologic management of children subjected to operation. An ongoing clinical problem is to improve utilization of vector electrocardiographic analysis in correlation with hemodynamic studies in evaluating the results of cardiovascular surgery and particularly to determine the extent to which the heart returns to normal after a successful operation. The patients involved will be followed over a number of years so that the role of changes in physiological status on subsequent events in their cardiovascular history can be evaluated prospectively.

Krovetz has been concerned with the basic physiology and hydrodynamics of arterial blood flow. In collaboration with the Engineering Department of the University, he is developing a nonlinear mathematical model to correlate flow, resistance, and elasticity in arteries. This project involves the use of a large digital IBM 709 computer for analysis and prediction. It represents an attempt to define some of the basic laws which determine the rates and characteristics of flow in vascular beds. Such knowledge ultimately has many applications in the more precise evaluation of cardiovascular disease in humans. McLoughlin, Schiebler and Krovetz are engaged in hemodynamic studies of the heart in endocardial fibroelastosis, Hurler's syndrome and the Laurence-Moon-Biedl-Bardet syndrome.

The Department of Pediatrics at the University of Florida College of Medicine has reached a minimally adequate staffing level only recently. Many of the research projects have not, therefore, yielded the full harvest of useful data which can be confidently expected in the future. As clinicians dealing daily with ill, handicapped, or retarded children and seeing them in contrast to healthy ones, we are provided with a continuous stimulus for research in the developmental sciences which hopefully will lead to better methods of dealing with developmental disorders and ultimately to their effective prevention.

References are available from the authors upon request.

Department of Medicine

RICHARD P. SCHMIDT, M.D.*
GAINESVILLE

Research in medicine is a continuum from the most "basic" of the laboratory sciences to the most "clinical" applications of new knowledge to the treatment and prevention of illness. Further, modern medical education incorporates experiences in research as part of the training of a physician.

At the University of Florida each student is given opportunity to work on an individual research project under the tutelage of a faculty member. Many students enter into research projects during additional elective periods and vacations. A fundamental thesis is that each physician entering into practice should carry with him an essential attitude of individual investigation, and he should possess the ability to examine new problems and to correlate scientific knowledge with clinical observations. Research in a medical school cannot be distinctly separated from teaching; it is rather an integral part of education and is a responsibility and duty of the faculty. The clinician-teacher has the unique opportunity of relating basic areas of knowledge in the sciences to the practice of medicine. The academic clinician usually will have included in his own educational experience several years of scientific research training as well as the experience necessary to be recognized in a medical specialty.

Within a medical school clinical department a variety of research interests and skills is represented. By and large, the stimulus for research comes from problems presented by the patient, but the methods of investigation may utilize the techniques of the science laboratory. The Department of Medicine at the University of Florida does not represent a single clinical discipline, but is divided into units of Neurology, Cardiology, Endocrinology, Renal Medicine, and others. Research activities of the Department are those of individual investigators or of groups interested in similar problems. Disciplinary lines are easily crossed in collaborative efforts. Investigative teams may include one or more senior faculty members, research fellows, student research assistants and technicians. Facilities include laboratories in the departmental areas of the College of Medicine and the University Hospital. Patients involved in a particular project may be studied in detail when hospitalized in the Clinical Research Center which constitutes a separate unit of the hospital.

Financial support for research is derived from many sources. The largest amount comes from grants from the National Institutes of Health. Additional and important contributions are made by foundations and voluntary health agencies. These include, for example, the American Heart Association, Florida Heart Association, Suncoast Heart Association, The National Foundation and The Florida Tuberculosis and Respiratory Disease Association.

The scope and nature of the research activities of the Department of Medicine are illustrated by the following list of selected publications by the staff within the past year.

Cardiology

1. Cox, M. A., G. L. Schiebler, W. J. Taylor, M. W. Wheat, Jr., and L. J. Krovetz: Reversible pulmonary hypertension in a child with respiratory obstruction and cor pulmonale. J. Ped. July, 1965.
2. Green, J. R., Jr., L. J. Krovetz and W. J. Taylor: Congenital heart disease as a manifestation of chromosomal mosaicism in two generations. Circ. 30: 1964. (Abstract)
3. Taylor, W. J.: Genetics and the Cardiovascular System. *Heart Disease*. Ed. by Hurst and Logue, McGraw-Hill, 1965.
4. Green, J. R., Jr., G. L. Schiebler and T. D. Bartley: The Wolff-Parkinson-White syndrome and ventricular septal defect. Dis. Chest, 47: 1965.
5. Green, J. R., Jr., L. J. Krovetz and W. J. Taylor: Congenital heart disease as a manifestation of chromosomal mosaicism in two generations. Circ. Supplement No. III, 1964. (Presented at 37th Scientific Sessions, American Heart Association meeting, 1964. (Abstract)
6. Green, J. R., Jr., L. J. Krovetz, D. R. Shanklin, W. J. Taylor, and J. J. De Vito: A pathological basis for sudden death in eight generations. Clin. Res. 13: 1965. (Abstract)
7. Wolfson, S. L., J. R. Green, Jr., N. B. Gildersleeve: Chromosomal analysis in idiopathic hypercalcemia of infancy. The Human Chromosome Newsletter, No. 13: Aug. 1964. (Abstract)
8. Morgan, Anne D., L. J. Krovetz, T. D. Bartley, M. W. Wheat, Jr., J. R. Green, Jr. and G. L. Schiebler: The clinical spectrum of single ventricle with congenital corrected transposition of the great vessels. Am. J. Cardiol. 15: 1965. (Abstract)

*Professor and Chairman, Department of Medicine.

9. Linhart, J. W., E. Braunwald and J. Ross, Jr.: Determinants of the duration of the refractory period of the atrioventricular nodal system in man. J. Clin. Invest. 44: 1965.
10. Linhart, J. W., R. E. Whalen and H. D. McIntosh: Clinical experience with sodium iothalamate—80% in cineangiocardiography. South. M. J. 58: 1965.
11. Shipp, J. C., J. Thomas and L. Crevasse: Oxidation of C^{14} labeled endogenous lipids by isolated perfused rat heart. Science 143: 1964.
12. Tubbs, F. E., L. Crevasse and M. W. Wheat: Localization of tritiated digoxin in dog myocardium by electron microscopic autoradiography. Circ. Res. 14: 1964.
13. Shipp, J. C., J. R. Spencer and L. Crevasse: Buffer distribution in isolated perfused rat heart measured by rubidium^{86}. Am. J. Physiol. 206: 1964.
14. Green, J. R., Jr., L. Crevasse and D. Shanklin: Fibromyxosarcoma of the pulmonary artery associated with syncope, intractable heart failure, polycythemia and thrombocytopenia. Am. J. Cardiol. 13: 1964.
15. Shipp, J. C., H. K. Delcher and L. Crevasse: Glucose metabolism by the hexose monophosphate pathway in the perfused rat heart. Biochim. et Biophys. Acta 86: 1964.
16. Crevasse, L., J. C. Shipp and H. K. Delcher: Glucose metabolism by the hexose monophosphate pathway in heart muscle homogenates. Biochim. et Biophys. Acta 86: 1964.
17. Crevasse, L. and J. C. Shipp: Effects of quinidine in glucose-U-C^{14} and palmitate-1-C^{14} metabolism in heart muscle. Am. Heart J. 68: 1964.
18. Crevasse, L.: Congestive heart failure in the dog. Southwestern Veterinarian 18: 1964.
19. Shipp, J. C., O. E. Matos, H. Knizley and L. Crevasse: CO_2 formed from endogenous and exogenous substrates in perfused rat heart. Am. J. Physiol. 207: 1964.
20. Kreager, J. A. Jr., M. W. Wheat, W. W. Weigel and L. Crevasse: Superior mesenteric artery embolus. Am. Surgeon 31: 1965.
21. Crevasse, L., W. H. Hewson, G. G. Hazouri and J. C. Shipp: Glucose metabolism of red blood cells: A study of triiodothyronine on red cell metabolism. J. Lab. Clin. Med. 65: 1965.
22. Shipp, J. C., O. E. Matos and L. Crevasse: Effect of temperature on metabolism of glucose-U-C^{14} and palmitate-1-C^{14} in perfused rat heart. Metabolism 14: 1965.

Endocrinology

1. Thomas, W. C., Jr., F. C. Schwalbe, Jr., J. R. Green, Jr., A. M. Lewis and E. D. Bird: Hyperventilation tetany associated with anxiety. Tr. Am. Clin. Climat. A. 76: 1964.
2. Thomas, W. C., Jr.: On the presence of iron in the bone. Diabetes, 14: 1965.
3. Freund, G., E. D. Bird, R. N. Kinman, A. P. Black and W. C. Thomas, Jr.: Effect of iodinated water on thyroid function. Clin. Res. 13: 1965. (Abstract)
4. Thomas, W. C., Jr., F. C. Schwalbe, Jr., J. R. Green, Jr., and A. M. Lewis: Tetany induced by hyperventilation in anxious subjects and the effect of adrenergic blockade. J. Clin. Invest. 44: 1965. (Abstract)
5. Bird, E. D., W. H. Ellis and W. C. Thomas, Jr.: Activation analysis of urine for trace elements. Tr. Second Int. Conf. on Activation Analysis. 1965. (In press)
6. Thomas, W. C., Jr., R. M. Anderson, M. J. Jurkiewicz, J. D. Aranjo and R. M. Blizzard: Clinical studies in thyroiditis. Ann. Int. Med. (In press)
7. Thomas, W. C., Jr., A. M. Lewis and A. Tomita: Pyrophosphates and the mineralizing potential of urine. Submitted to Clin. Sc. for publication.
8. Schmidt, M. D., A. M. Lewis, E. D. Bird and W. C. Thomas, Jr.: The effects of induced hypercalcemia on activity of the parathyroid glands. Submitted to Am. J. Path. for publication.
9. Tomita, A. and W. C. Thomas, Jr.: Mineralization in vitro of human and animal collagen. (In preparation)
10. Tomita, A. and W. C. Thomas, Jr.: Comparative studies on mineralization in vitro of cartilage matrix and tendon. (In preparation)
11. Freund, G. and P. O'Hollaren: The determination of acetaldehyde and acetone in expired air and its application to the ethanol tolerance test. J. Lipid Res., Oct. 1965.
12. Freund, G.: The calorie deficiency hypothesis of ketogenesis tested in men. Metabolism, 14: 1965.
13. Freund, G.: Serial determinations of acetaldehyde and acetone in alveolar air after standard amounts of ethanol in *Biochemical Aspects of Alcoholism,* Pergamon Press, 1965. (In press)
14. Freund, G., E. D. Bird, R. N. Kinman, A. P. Black and W. C. Thomas, Jr.: Effect of iodinated water on thyroid function. Clin. Res., 13: 1965. (Abstract)
15. Bird, E. D. and F. C. Schwalbe, Jr.: Prolonged hypoglycemia secondary to tolbutamide. Ann. Int. Med. 62: 1965.
16. Bird, E. D., W. H. Ellis and W. C. Thomas, Jr.: Neutron activation analysis of urine from patients with renal stone. Tr. Second Int. Conf. on Modern Trends in Activation Analysis, Apr. 1965.
17. Diaz de Arce, H., L. Crevasse and J. C. Shipp: Decarboxylation of pyruvate by the actomyosin system in cardiac myofibrils. Clin. Res. 12: 1964. (Abstract)
18. Davis, Dave, J. C. Shipp and E. Pattishall: Attitudes of diabetic boys and girls toward diabetes. Diabetes, 14: 1965.
19. Shipp, J. C., R. Cunningham, R. O. Russell and A. Marble: Insulin resistance: Clinical features, natural course and effects of adrenal steroid treatment. Med. 44: 1965.
20. Greenman, W. C. and J. C. Shipp: Metabolism of glucose-U-C^{14} in perfused hearts of alloxan diabetic rats. Biochim. et Biophys. Acta, 97: 1965.
21. Shipp, J. C., O. E. Matos and L. Crevasse: Effect of temperature on glucose-U-C^{14} and palmitate 1 C^{14} in perfused rat heart. Metabolism 14: 1965.
22. Delcher, H. K., Melvin Fried and J. C. Shipp: Metabolism of lipoprotein lipid in the isolated perfused rat heart. Clin. Res. 13: 1965. (Abstract)
23. Delcher, H. K., Melvin Fried and J. C. Shipp: Metabolism of lipoprotein lipid in the isolated perfused rat heart. Biochim. et Biophys. Acta, 1965.
24. Chaudhuri, B. N., J. C. Shipp, O. E. Matos and L. Dragstedt: Thyroid function and metabolism of glucose-U-C^{14} and palmitate-1-C^{14} in perfused rat heart. Fed. Proc. 24: 1964. (Abstract)
25. Pawliger, D. and J. C. Shipp: Simple rapid method for quantitation of urine glucose excretion. J.A.M.A. (In press) 1965.
26. Pawliger, D. and J. C. Shipp: Evaluation of the rapid dextrostix method for the determination of blood glucose, J. Florida M.A. 52: 1965.
27. Crevasse, L., W. H. Hewson, G. G. Hazouri and J. C. Shipp: Glucose metabolism of red blood cells: A study of triiodothyronine on red cell metabolism. Lab. and Clin. Med. 65: 1965.
28. Shipp, J. C. and M. M. Shipp: History without pain. A.D.A. Forecast, Mar.-Apr. 1965.
29. Munroe, J. F. and J. C. Shipp: Glucose metabolism in leucocytes from patients with diabetes mellitus, with and without hypercholesteremia. Diabetes, 1965.
30. Shipp, J. C.: Dentistry and Diabetes. J. Fla. State. Dental Soc., Aug. 1965.

31. Shipp, J. C.: Interrelation between carbohydrate and fatty acid metabolism of isolated perfused rat heart. Metabolism 13: 1964.
32. Shipp, J. C., O. E. Matos, H. Knizley and L. Crevasse: CO_2 formed from endogenous and exogenous substrates in perfused rat heart. Am. J. Physiol. 207: 1964.

Renal Medicine

1. Levin, D. M., T. Perenich and J. R. Cade: Influence of dietary sodium on renal function in patients with chronic renal disease. Ann. Int. Med., Feb. 1965.
2. Kleit, S., D. M. Levin, T. Perenich and J. R. Cade: Renal excretion of ascorbic acid by dogs. Am. J. Physiol., July, 1965.
3. Levin, D. M., Kleit, S., D. Shires and J. R. Cade: Bile peritonitis and acute renal failure treated by peritoneal dialysis. South. M. J., Apr. 1965.
4. Cade, J. R. and T. Perenich: Secretion of aldosterone by rats. Am. J. Physiol., June, 1965.
5. Fregly, M. J., J. R. Cade, J. W. Waters, J. Straw and R. E. Taylor, Jr.: Secretion of aldosterone by adrenal glands of propylthiouracil-treated rats. Endocrinology. (In press) Nov. 1965.
6. Levin, D. M. and J. R. Cade: Effect of diet on renal function. Ann. Int. Med. (In press) Nov. 1965.
7. Levin, D. M. and J. R. Cade: Effect of dietary protein in chronic renal failure. Clin. Res., Jan. 1965. (Abstract)
8. Levin, D. M. and J. R. Cade: Effects of intravenous d-Aldosterone in man. To be published in Circulation, Oct. 1965. (Abstract)

Neurology

1. Schwarz, G. C. and M. Greer: Immunologic tolerance to neural tissues in the newborn. Clin. Res. 12: 1964. (Abstract)
2. Greer, M.: Benign intracranial hypertension. V. Menstrual dysfunction. Neurology 14: 1964.
3. Bowers, D. E. and M. Greer: Cerebellar agenesis in siblings. Neurology 14: 1964. (Abstract)
4. Shanklin, D. and M. Greer: Encephalomyelitis following chicken-pox. J. Florida M. A. 52: 1965.
5. Williams, C. M. and M. Greer: Gas chromatography of vanilmandelic acid in pheochromocytoma. Clinica Chimca Acta. (In press)
6. Greer, M.: Benign intracranial hypertension. VI. Obesity. Neurology 15: 1965.
7. Greer, M.: *Pseudotumor cerebri* in Holt, L. E., Jr., R. McIntosh and H. Barnett. Pediatrics, ed. 14, New York, N. Y. Appleton-Century-Crofts, Inc. (In press)
8. Greer, M.: Tumors of neural crest origin. Thesis-American Neurological Association, 1965. Arch. Neurol. 13:1965.
9. Greer, M., and A. Anton: Effect of psychopharmacological drugs on brain damaged children. American Academy of Neurology. (Abstract)
10. Nevis, A. H. and G. H. Collins: Electric impedance studies of rat brain during perfusion fixation. Abstract of paper for 1964 Biophysical Society Meetings in Chicago. (In preparation for publication)
11. Wilder, B. J. and R. P. Schmidt: Propagation of epileptic discharge from chronic neocortical foci in monkey. (In press for Epilepsia)
12. Bond, J. O., D. T. Quick, J. J. Witte and H. C. Oard: The 1962 epidemic of St. Louis encephalitis in Florida. I. Am. J. Epidemiology. 81:1965.
13. Bond, J. O. and D. T. Quick: The 1962 epidemic of St. Louis encephalitis in Florida II. Serologic surveys for inapparent infections. (In preparation)
14. Quick, D. T., R. E. Serfling, I. L. Sherman and H. L. Casey: The 1962 epidemic of St. Louis encephalitis in Florida. III. A survey of inapparent infections in an epidemic area. Am. J. Epidemiology, 81: 1965.
15. Quick, D. T., A. G. Smith, A. L. Lewis, G. A. Sather and Wm. McD. Hammon: California encephalitis virus infection. A case report. Am. J. Trop. Med. & Hyg., 14: 1965.
16. Evans, J. and D. T. Quick: Polyacrylamide gel electrophoresis of spinal fluid proteins in neurologic disorders. Arch. Neurol. (In press)
17. Evans, J. and Quick, D. T.: Polyacrylamide gel electrophoresis of spinal fluid proteins. J. Lab. & Clin. Med. (In press)
18. Quick, D. T.: Unusual neurologic manifestation of hyperthyroidism: Upper motor neuron lesion. (In preparation)
19. Quick, D. T.: Included in a cooperative study of epidemic of St. Louis encephalitis in Houston, 1964. J.A.M.A. 193: 1965.

Infectious Disease

1. Sanders, W. E.: The challenge of salmonellosis. Clin. Med. 72: 1965.
2. Sanders, W. E., P. S. Brachman, E. A. Friedman, J. M. Goldsby and C. M. McCall: Salmonellosis in the United States: Results of nationwide surveillance. J. Hygiene (J. Epid.) 81: 1965.
3. McCall, C. E., W. E. Sanders, J. R. Boring, P. S. Brachman and M. Wickingsson: Delineation of chronic carriers of S. derby within an institution of incurables. Antimicrobial Agents and Chemotherapy, 1964.

Hematology

1. Noyes, W. D. and P. H. Jordan: Iron absorption following portacaval transpositon in dogs. Proc. Xth Cong. Int. Soc. Haemat: August. 1964. (Abstract)
2. Sorsdahl, O. S., P .E. Taylor and W. D. Noyes: Extramedullary hematopoiesis, mediastinal masses and spinal cord compression. J.A.M.A. 189: Aug. 1964.
3. Noyes, W. D., F. Hosain and C. A. Finch: Incorporation of radioiron into marrow heme. J. Lab. Clin. Med. 64: Oct. 1964.
4. Noyes, W. D.: Erythropoietin versus uremic plasma. Clin. Res. 13: Jan. 1965. (Abstract)
5. Morgan, W. C. and W. D. Noyes: Leukemia in Florida. Clin. Res. 13: Jan. 1965. (Abstract)
6. Spitzer, N., T. F. Newcomb and W. D. Noyes: Pyridoxine responsive hypolipidemia and hypocholesterolemia in a patient with pyridoxine responsive anemia. New. Eng. J. Med. (In press)
7. Newcomb, T. F. and M. Hoshida: Factor V and thrombin. Scandinav. J. Clin. & Lab. Invest. 1965.
8. Newcomb, T. F.: Treatment of hemophilia with purified plasma fraction. *The Hemophilias.* University of North Carolina Press, 1964.
9. Newcomb, T. F.: Method of T. F. Newcomb. Current Therapy. (In press)
10. Hussain, Q. Z. and T. F. Newcomb: Effects of thrombin factor V. Xth Cong. Int. Soc. Haemat., Stockholm, 1964. (Abstract)
11. Hoshida, M. and T. F. Newcomb: Cellulose—thrombin: Preparation and properties and interaction with Factor V. J. Clin. Invest. May, 1965. (Abstract)

Pulmonary Function

1. Swenson, E. W., D. C. Funk, S. V. Guzman and T. N. Finley: Vascular shunts in the lungs: Clinical evaluation by temporary unilateral pulmonary artery occlusion. Thoracic and Cardiovascular Surgery. Oct. 1964.
2. Swenson, E. W. and R. Llamas: Diagnostic clues in pulmonary thromboembolism evaluated by angiographic and ventilation blood flow studies. Thorax, July, 1965.

President's Page

FMA Task Force Assignments

Major changes in the practice of medicine are under way. Political and socioeconomic pressures have produced legislation which will provide tax support for the costs of health care to a large segment of the population: for all who are age 65 and over, and for those in financial need at any age.

It is our purpose to see that such changes will not interfere with the personal relation between physician and patient, hamper freedom of the physician in prescribing for the patient or thwart medical progress toward improving the quality of medical care.

To this end, a Task Force has been appointed by the Board of Governors of the Florida Medical Association. Specific assignments under consideration by the Task Force are: Public Law 89-97. Title XVIII, Part "B"; Title XIX (Medical Assistance for the Needy), and changes in the Crippled Children's Commission, Maternal and Child Welfare, and Vocational Rehabilitation programs; Medical Facilities Planning Committee; Heart Disease, Cancer and Stroke; National Commission on Community Health Planning, and Office of Economic Opportunity (Poverty Program.)

Concerning these subjects, the Board of Governors has approved the following actions:

1. Nomination of Blue Shield to be the carrier for Voluntary Supplemental Medical Insurance.
2. Urged the State Cabinet to continue Medical Assistance for the Needy after July 1, 1966 under the provisions of Florida Statutes 409.45 and appropriations act, item 935.
3. Approved the principle that physician services, wherever rendered, should be made available to all public welfare recipients and to all other needy citizens in those welfare categories through the purchase of health insurance by the state for eligible needy individuals and of the use of the carrier as fiscal agent for care of the previously unidentified needy sick.
4. Favored the policy of encouraging each hospital medical staff to assume responsibility and control of medical care in hospitals in the following manner:
   (a) All agreements and contracts for medical services in a hospital should be made by and with the Medical Staff. There should be no contractual agreement between individual physicians and the Hospital Board.
   (b) The Hospital Medical Staff and each physician should agree that a percentage of the fee due him for hospital medical services supervised or rendered to welfare recipients compensable through tax-supported health insurance or government payment should be paid to the Medical Staff Fund.
   (c) The Medical Staff Fund should be completely under the control of the Medical Staff and used to compensate for medical services rendered in the hospital for the benefit of all hospital patients, continuing medical education, and the improvement of medical care.
   (d) For the purpose of continuity and coordination of medical effort, the Medical Staff should instruct the Insurance Carrier or Government Agency to deposit such payments with the Florida Medical Foundation into the account of that Medical Staff.
   (e) The Medical Staff by letter may instruct the Medical Foundation as to the manner of disbursing its staff funds.

The Task Force will continue to study and observe the development of these major issues and act as the advisory committee of the Florida Medical Association concerning these programs.

H. Phillip Hampton

Editorials

AMA House of Delegates Special Convention October 2-3: Report and Comment

The American Medical Association House of Delegates has met in very few special called sessions in its entire existence but two times within this year. At the last regular meeting of the House in New York, the report of the Reference Committee on Legislation and Public Relations stated that the American Medical Association policy with regard to the imminent passage of the health care for the elderly law would be formulated after the law was enacted, in special session if necessary. At the close of the meeting in New York, many delegates thought that it would not be necessary to call a special session in view of the fact that the regular clinical session, scheduled for November 28, 1965, was well in advance of the effective date of the proposed Medicare law.

The Constitution and Bylaws of the American Medical Association, Chapter 9, Section 5-d, state a special session may be called by the Speaker on request of 25 or more delegates representing one third or more of the state associations. This occurred and the special session was called. None of the Florida delegation signed this request.

The call stated, "To consider pertinent items relating to current problems incident to health care laws and pending legislation."

Everyone agrees that Public Law 89-97 is a bad law based not on need but on political expedience. Many believe that the American Medical Association should have nothing whatsoever to do with the Secretary of HEW in drawing up the necessary rules and regulations. I must remind you, however, that this is an insidious bill drawn so as to place the blame for its failure to work on the shoulders of the American physicians. Our appointed consultants and advisors to the Secretary are not collaborators, but are there to advise and to learn what is planned, not only now but in the future so that we may be forewarned and therefore better prepared for the next onslaught.

This session was preceded by a one day briefing session for executives and designated members of state and county associations at which time Secretary Gardner and two of his deputies, Mr. Arthur Hess and Dr. Philip Lee, Mr. McNerney of Blue Cross, Dr. Russell Carson and Mr. Howard Hassard of Blue Shield, Mr. C. Manton Eddy of the health insurance industry and Dr. Edwin L. Crosby of the American Hospital Association discussed the problems with which each was faced. This meeting was summarized by our able Past President, Dr. Edward R. Annis.

The House convened at 9:30 a.m. Following the remarks of the Speaker, Dr. Percy Hopkins, Chairman of the Board of Trustees, brought a progress report on the law and was followed by Dr. James Z. Appel, President of the American Medical Association, who made an inspiring speech.

It is my humble opinion that if his speech—or one of similar context—had been delivered by President Appel in his inaugural address, much of the dissension in our ranks would not have occurred. This speech embodied all of the principles that the American Medical Association has ever stood for and reaffirmed its position as being right. The individual doctor is well respected by his patient, but the American Medical Association is a giant bugaboo which the press has played up as an evil monster. I wish to make it clear that though I do not agree entirely with all statements made by our leaders, and they may have allowed themselves to be backed into a corner, in which any statement, even a yea or nay could be used

against them, I ask myself—"Could I have done better?" Could you? Many of the statements of our President, Board of Trustees and officers have been taken out of context to such a point that some of their statements appeared to be diametrically opposed to their intention.

Following the President's address, the House had 43 resolutions presented on 20 separate subjects. The Reference Committee heard 125 witnesses before adjourning at 7:30 p.m. It was then left to the Committee to perform the monumental task of assimilating all the ideas and producing a report, which is summarized as follows:

I. Legal counsel for the American Medical Association has stated that an individual physician acting independently and not in concert with others can lawfully refuse to accept any person as a patient who is a beneficiary under the program, or he may elect to treat such persons.

On Oct. 1, 1965, the Judicial Council rendered its opinion, which states:

> The Principles of Medical Ethics are applicable to physicians when they engage in group action as well as when they act individually. Section 4 calls upon physicians to observe all laws. Accordingly, medical organizations must be mindful of the possible consequences of the actions they propose, engage in or encourage.
>
> Under ordinary circumstances, the individual physician, acting independently, is ethically free to select his patients. (See Section 5 of the Principles.) (a) He may decline to render medical services to persons covered by the Health Insurance for the Aged Act. (b) He may choose to treat such persons without charge. (c) He may treat patients with the advance understanding that he will look to them exclusively for payment and that he will or will not in any way help them in obtaining reimbursement for the cost of his services or the cost of associated services.
>
> Under some circumstances, however, the physician's freedom to select his patients may be circumscribed by overriding ethical considerations. For example:
>
> 1. A physician should respond to any request for his assistance in an emergency.
> 2. Once having undertaken a case, the physician should not neglect the patient, nor should he withdraw from the case without giving notice sufficient to allow the patient to obtain another physician.
> 3. If a physician decides not to participate in the Medicare program or decides to limit his participation, he should so advise the patient in advance of treatment. This applies to services rendered by the physician as well as hospital services and other benefits provided under the program.
> 4. As provided in Section 1 of the Principles of Medical Ethics, a physician should not refuse to render medical services to any person if as a result such person will be unable to get necessary medical care.

It should be noted also that Section 6 of the Principles provides that "A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause the deterioration of the quality of medical care." If after regulations are promulgated and the Medicare law becomes effective, the individual physician, acting independently and not in concert with others, finds it does tend to impair the free and complete exercise of his medical judgment and skill or to cause a deterioration of the quality of medical care, he would be justified under this Principle in not participating under the law. The physician is ordinarily free to select his patients, subject to such ethical limitations as previously stated.

II. (a) The American Medical Association shall continue to meet with representatives of agencies and departments of the federal government, to participate in such advisory committees which are created, and to contribute whatever advice and suggestions are deemed advisable and necessary in the formulation and revision of regulations which will help it achieve Medicine's objectives on behalf of the public and the profession.

(b) This House of Delegates expresses confidence in the Board of Trustees of the American Medical Association and its Advisory Committee on Public Law 89-97 for their continuing efforts to secure regulations which are in the best interests of good patient care.

III. It is recommended that certification for admission to hospital be met on the same basis as is now customary locally.

IV. The fiscal agents should be left to the individual state or locality.

V. Reasonableness of fees shall be determined by local or state medical societies.

VI. Utilization review committee should be limited to practicing physicians.

VII. A physician may receive compensation by the patient direct, which is the recommended form, or by assignment of the patient.

VIII. There will undoubtedly be a shortage of hospital beds and methods should be outlined to conserve beds for emergencies.

IX. It was the opinion of legal counsel that concerted action by the American Medical Association or any group would make the subject liable for action under the Sherman Anti-Trust Law. Other legal opinions were presented which questioned this statement, but in final analysis they admitted the possibility of anti-trust action being instituted.

X. Refusal to sign the nondiscrimination pledge does not flout the law and the Board of Trustees is urged to oppose actively any attempt to force this signing.

XI. All professional fees should be separated from hospital charges.

Many segments of the American economy have suffered great losses from the "arm-twisting" tactics used on this Congress. Yes, our entire country has moved—not just the one step—but many steps toward socialism. American medicine has suffered a major battle loss—yes, a Dunkirk. We hope, however, that we have not lost the war. We must unite behind our leaders as we have never done before for if we are divided it will be very easy for our enemy, "Great Father Government," to conquer and entirely socialize not only medicine but our entire Great Republic. We must be on guard and mindful of our leaders' position and statements. If we disagree, then disagree and let it be known. But, let it be known in the proper channels. We will never be able to win by ourselves. We must unite with the farmers and fight the agricultural subsidies and the multiple socialized farm bill that they oppose. We must unite with labor and fight the compulsory unionism. We must unite with business and fight to prevent price fixing. Yes, we must unite with every segment of our economy to prevent the usurpation of property rights and individual freedom by government and minorities. We must unite at the ballot box to elect men with stamina and courage who cannot be "arm-twisted" and cajoled into passing what the "Great Father" believes is best for all of his children. We must join AMPAC, FLAMPAC and the political organization of our choice at the grass roots. The skirmishes of the past are over and we have lost the first battle. But are we going to give up? NO! A thousand times no! We must Fight! Fight! Fight!

Francis T. Holland, M.D.
Tallahassee

President in Action

Florida Medical Association president Dr. H. Phillip Hampton is shown October 1 as he addressed a national orientation conference on Public Law 89-97 which preceded a special called convention of the American Medical Association House of Delegates held October 2 and 3 in Chicago.

Diabetes Detection

The Senate has recently added another million dollars to the budget of the Diabetes and Arthritis Program of the U.S. Public Health Service largely to investigate new techniques for the early recognition of diabetes following a demonstration that diabetes in the Pima Indian is 10 times greater than that in the country as a whole. Simultaneously the American Diabetes Association is organizing its annual Diabetes Detection Drive which is aimed not only at a one week mass laboratory study for abnormal glucose metabolism but also to make the public more aware of the disease, its widespread distribution and its many manifestations.

Much work and money, with considerable attention by the various means of communication to both the government's concern with the problem and organized medicine's diabetes week through the ADA, will no doubt lead to the detection of thousands of new cases of diabetes in the United States. Indeed, if certain figures prove to be correct, this disease may well move from sixth to first place as the primary cause of death in our country today for almost 75% of diabetics die prematurely from cardiovascular disease and the percentage of persons dying with cardiovascular disease that are diabetic may well take on enormous proportions if some of the recent work of Valance-Owen on synalbumin proves to have merit.

Furthermore, whereas diabetes, as we know it, is genetically recessive, synalbumin appears to be dominant and it should be if the proposition that it is nothing more than the beta chain of degraded insulin is correct. In my limited way of thinking, this does not alter the importance of its discovery in increased amounts in association with coronary disease in nondiabetic family members of patients in a prediabetic state or with overt diabetes mellitus. As a matter of fact, it makes one consider the possibility that diabetes may well be added to the ever expanding list of autoimmune diseases.

The interesting, but as yet inapplicable work of Phyllis Peace on L-forms, episomes, and autoimmune disease, combined with the studies mentioned which are now being done on synalbumin, may well lead to an antibiotic cure for the patient who is genetically susceptible to destruction of his major dynamic metabolic stabilizer when an antibody response to his own tissues is triggered into constant antigen production. Perhaps diabetes neither begins nor ends in the pancreas, that is, the initial insult could come with autoimmunity and the end results be seen in the well known imbalance of the endocrine system leading primarily to growth-hormone stimulation with its vascular implications. Such stimulation may well occur when both insulin and sugar are high in the blood well before complete depletion of the endocrine pancreas has occurred.

To bring this low power haze into more proper focus, however, the physician's role in finding the unknown diabetic, not only during the period of November 14 to 20, but every day in his practice, should be emphasized. Despite the fact that as we move along we are more and more convinced that the abnormal glucose tolerance curve is but one manifestation of a rather protean disease, it still seems worth while to recognize it early and assure the patient of the best possible care in order at least to retard its eventual consequences as long as possible.

No doubt time will provide us with the knowledge to make the diagnosis of this disease long before an abnormal glucose tolerance curve appears, but, in the meantime, we must pay more attention to those built-in, provocative tests such as pregnancy and other stressful situations such as automobile accidents, and concern ourselves more with the one and two hour postprandial blood sugar determinations, that are so convenient to all of us. The insistence by our laboratories in taking the blood sugar in a fasting state should be totally discouraged for the detection of new cases and probably for ascertaining the efficacy of treatment in the known diabetic as well.

Even in the dim light of our present understanding the physician seems justified in making the diagnosis of diabetes despite a normal glucose tolerance curve in patients with specific findings of nephropathy, retinopathy or neuropathy as well as those with necrobiosis lipoidica or xanthoma eruptiva. Perhaps they should be labeled as adiabetic diabetics or still better the name could be changed to microangiopathy with or without diabetes mellitus.

Matthew E. Morrow Jr., M.D.
Jacksonville

Influenza Vaccination

There may be an increase in influenza in the United States this winter. Many can avoid a bout with it by proper immunization. The forecast for the present season is based on the two to three year periodicity of the disease, says the Journal of the American Medical Association. The last major outbreaks were in 1962-1963, and, on the West Coast, in 1963-1964.

Immunization is particularly recommended for certain high risk groups. These groups include:

- Persons at all ages suffering from chronic disease, such as rheumatic heart disease, other heart and circulatory problems, respiratory ailments such as asthma and emphysema, and diabetes.
- Persons in older age groups. Influenza deaths are higher in those past 45, and much higher in those beyond 65 years.
- Pregnant women.
- Patients in nursing homes and chronic disease hospitals.

Ideally, vaccination should begin in September and should be completed by mid-December. There should be two doses, about two months apart, to provide full protection. The interval can, however, be reduced if an epidemic threatens. Maximum immunity comes about two weeks after the second dose. Those vaccinated within the past two years will need only one booster dose this fall.

The vaccine in common use this season offers protection against five different types of virus, all capable of causing influenza. It will not insure complete protection against influenza, but it has shown for some years a marked degree of protection for a large majority of those who receive it.

Others Are Saying

Doctors and Medicare

Last week Dr. William H. Barney, President-elect and Public Relations Chairman of the Lynchburg Academy of Medicine, addressed a local civic group. He urged all Lynchburg physicians to comply with the medicare law. He gave for his reason that, "I have never subscribed to the theory of disobedience to the law, for the sake of conscience alone."

This is arrant nonsense and a gross distortion of fact.

The medicare law which was enacted by President Johnson's puppets in the Congress is entirely voluntary, as far as doctors and patients are concerned.

We repeat, medicare does not compel the participation by either doctors or their patients.

Doctors have an absolute right to participate in the medicare program, as they determine within their sole discretion. If they do choose to participate, then they elect socialized medicine for their medical practice. Or, they may refuse to participate and strike a blow for freedom, as is also their right.

All individuals over 65, who come within the provisions of the medicare law, have the right to choose to participate in the benefits provided under the law. If they decide to participate, they become free loaders; they elect to receive benefits from a program for which they have paid absolutely nothing and, thus, participate in the something-for-nothing philosophy which now permeates American life. They have an equal right to assert

their individual initiative and responsibility and refuse the handout.

The compulsion in the medicare law is directed solely at those who will pay the freight. The workers and their employers will pay the cost of the medicare program through a drastic increase in their Social Security income taxes. For example, a working man earning $6,600 a year will pay a Social Security income tax of $174 during 1965. Next year, 1966, his tax leaps to $277.20. His tax will continue to increase further under the present law, at least until 1987. And every year, his employer will have to match these payments.

The most insidious feature of this compulsion is the fact that the working man and his employer will not be putting Social Security income tax money aside for the old age of the working man but, instead, will be paying for a medical program in respect to strangers, who never contributed one dime.

When the working man reaches 65, all he can hope for is that there is someone else around earning through labor who will pay his freight.

The American Medical Association, as a group, has straddled the fence on this issue but some of its leaders, including its president, have asked doctors to cooperate with medicare. Last week, the Association of American Physicians and Surgeons roundly condemned the AMA and some of its officers and urged its members to follow a policy of complete non-participation in the medicare program. The president of this latter organization pointed out the obvious, that doctors have an absolute right to refuse to participate, as "there is no law to violate."

While the medicare program is presently entirely voluntary, except for the taxpayers, the Congress will expand the program in succeeding years, as pointed out by Russell Kirk in a column on this editorial page last week.

Since this country is rapidly abandoning all aspects of its republican form of government and is becoming a Socialist nation, it is reasonable to expect that, before too many years have passed, the medicare program will be compulsory in respect to doctors and patients. There is no doubt that this time of compulsion will be accelerated by any voluntary participation by the medical profession.

As emphasized by Dr. Kirk, doctors, of all people, should be familiar with the fact that socialized medicine has been bad medicine wherever it has been tried in the world. In those nations which have indulged in this Socialist experiment, the socialized medicine program has invariably become bankrupt, costs have spiraled, the tax load has risen tremendously, and the traditional personal relationship between doctor and patient has been destroyed. Without exception, the Socialist visionaries have underestimated many fold the costs of such programs.

Those who cherish liberty are bitterly disappointed that the medical profession, which fought socialized medicine so strongly for so many years, has now abjectly capitulated, as evidenced by spokesmen for the American Medical Association and the Lynchburg Academy of Medicine.

The man next door is reluctant to pull a weed. "Who knows?" he asks, "it may be a part of Washington's natural beauty program."

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DOCTOR, WOULD YOU LIKE TO BE AMONG A SELECT 25?

We're referring, of course, to the 25 spaces reserved for scientific exhibits during the 1966 Annual Meeting of the Florida Medical Association being held May 12-15 at the Diplomat Hotel, Hollywood.

Applications are now being accepted for potential exhibits by Florida medical men and women. An outstanding collection of scientific visual presentations is rapidly being compiled. Spaces are 10 feet wide and eight feet deep, and a few yet remain.

If you want to be among the select 25, send in a brief description of your planned exhibit to Richard G. Connar, M.D., Chairman, Scientific Work Committee, P. O. Box 2411, Jacksonville 32203. Don't delay!

Association News

Board of Governors

Summary of September Meeting

In its meeting held September 23-25, the Association's Board of Governors took the following actions:

1966 ANNUAL MEETING.—Adopted the format for the 1966 meeting to be held at the Diplomat Hotel, Hollywood, May 12-15, 1966.

Approved the following recommendations:

1. That a resolution brought to the Reference Committee must have a sponsor present before the Reference Committee; otherwise, the resolution is automatically dead.
2. That all resolutions must be filed by 6 p.m. of the day preceding the First Meeting of the House of Delegates.
3. That Reference Committee reports be ready for distribution to the delegates by Saturday noon preceding the Second Meeting of the House on Sunday morning.

PRESIDENTS AND SECRETARIES CONFERENCE.—Approved the dates of January 29-30, 1966, for the Conference of Presidents and Secretaries of County Medical Societies to be held in Orlando, and scheduled the next regular meeting of the Board of Governors for January 16, 1966, at the FMA Building in Jacksonville.

CIVIL RIGHTS ACT OF 1964.—Requested the Association's Legal Counsel to prepare an article for The Journal of the Florida Medical Association and a condensed item for the "Briefs" regarding the physicians' compliance with the Civil Rights Act of 1964.

Since the meeting of the Board it has been ruled by the Department of Health, Education, and Welfare that it is not necessary for physicians to sign compliance agreements when rendering services to welfare recipients. Alternative method provides for statement on back of vouchers that the State Department of Public Welfare has assured compliance and does not require the physician's signature.

FMA TASK FORCE.—Approved the formation of a Task Force to study and advise regarding the implications and application of Medicare; Heart Disease, Cancer and Stroke; Conference on Community Health Services; and Economic Opportunity Act. The Task Force is composed of the President, President-Elect, Immediate Past President, Chairman of the Council on Legislation and Public Agencies, Chairman of the Council on Medical Economics, Chairman of the Council on Medical Education and Hospitals, Chairman of the Council on Medical Services, Chairman of AMPAC, and Chairman of National Association of Blue Shield Plans.

PKU TESTING.—Received as information the President's appointment of a physician advisory committee to the State Board of Health to implement the PKU Testing Law.

BLUE SHIELD.—Recommended Florida Blue Shield as the carrier of the voluntary supplementary insurance under the provisions of Title XVIII, Section B, of P.L. 89-97 (Medicare).

PREVAILING FEE.—Approved Blue Shield developing contracts utilizing the prevailing fee concept in payment for physician services, providing consultation be held with the Blue Shield liaison committee and the Fee Schedule Committee before any contracts embodying this principle are sold and an intensive informational campaign be undertaken by the FMA to assure that the physicians of Florida understand and accept this principle.

DIVISION OF FEES.—Recommended that the Florida Industrial Commission, Workmen's Compensation Division, use the following method for arriving at professional fees for services of radiologists and pathologists (This subject arose because of the fact that, as recommended by the FMA House of Delegates, one hospital no longer accepts payment for professional services in radiology and pathology.) Pathology: (a) Clinical Pathology—Fees for professional services 35 per cent; technical 65 per cent; (b) Anatomic Pathology—fees for professional services 80 per cent; technical 20 per cent. Radiology: Fees for professional services 40 per cent; technical 60 per cent. (This division of fees shall serve until such time as the Florida Medical Association Relative Value Studies have been revised to include the division of fees for these services.)

THIRD MEDICAL SCHOOL.—Approved a special report of the Council on Medical Education and Hospitals entitled "A Third Medical School in Florida?" The conclusion of this report reads as follows: "The Florida Medical Association's Council on Medical Education and Hospitals joins with the Surgeon General in recognition of the need for new medical schools and is not opposed to a third medical school for the state. It would seem wise, however, to give our full support to the two existing ones until such a time as they are stronger economically and scientifically."

FEDERAL FUNDS.—Voted unanimously that the Florida Medical Association not accept any federal funds for any programs, but only from individuals and organizations.

MEDICAL ASSISTANCE.—Urged the Cabinet of the State of Florida to continue medical assistance to the needy in accordance with the provisions of Chapter 409.45 Florida Statutes.

Recommended that the insurance carrier for the supplemental insurance (P.L. 89-97) should be the carrier and fiscal agent for the state-supported medical assistance for other needy, and authorized the FMA Task Force to explore with state officials possible methods of accomplishing such objectives subject to approval of the Board of Governors and the House of Delegates.

RESPONSIBILITY FOR MEDICAL CARE.—Approved the principles contained in the President's Page in The Journal, September 1965, "Responsibility for Medical Care," with the understanding that participation by individual physicians is voluntary, and authorized the President to explore this subject with component county medical societies.

OTHER REPORTS.—Reviewed numerous other reports of councils and committees and took appropriate action where necessary.

American Medical Association

AMA Survey of Selected Teaching Hospitals

The American Medical Association recently conducted a brief survey of teaching hospitals for the purpose of identifying the present pattern of hospital care in teaching hospitals as it may relate to particular aspects of the Report of the President's Commission on Heart Disease, Cancer and Stroke.

A survey was made of inpatient admissions from 28 selected teaching hospitals across the country. It was found that of 13,362 inpatient admissions, 4,149 or 31% resided over 50 miles from the facility, or well beyond the hospital's normal service area. It would also be fair to assume that the cases referred from the greater distance would more often require highly sophisticated techniques.

The survey also showed that 28% of the patients came from communities of less than 10,000 population. It is apparent that, although most of the teaching hospitals are located in highly urbanized areas, a substantial part of the inpatient load is from outlying smaller communities. This finding belies the argument that the rural patient receives poor medical care.

In addition, the survey indicated that the patients were referred to the hospital by local physicians in 59% of the admissions. Once again, the argument that physicians are unaware of or do not use major medical centers for specialized diagnosis or treatment, as needed, is contradicted.

Of the hospitals surveyed, there was an association or affiliation with another hospital for a variety purpose and in the following percentages: 78% for teaching medical students; 81% for internship programs; 93% for residency programs; 81% for postdoctoral programs; 81% for referral of special diagnostic problems; 67% for exchange of special equipment; 85% for the exchange or for the use of specialty trained personnel.

It was found that 95% of the hospitals were associated with a medical school. All of the surveyed hospitals take part in research programs: 74% include independent research; 96% include research in connection with a medical school; and 96% include research programs in connection with a government agency. All the hospitals also reported that they furnish care for research program patients where all or part of the cost is not paid by the patient.

SPECIALTY NEWS

Obstetrics and Gynecology

The winter meeting of the Florida Obstetric and Gynecologic Society will be held December 3-5 at the Nassau Beach Hotel, Nassau, Bahamas. Guest speakers will be Drs. Frank Locke, Winston-Salem, N. C.; James Walker, Dundee, Scotland, and Curtis Mendelson, Green Turtle Cay, Abaco, Bahamas. Four case reports will be presented by members of the society and discussed by a panel consisting of the guest speakers and one or two other members.

Henry L. Wright, M.D., Tampa

Pediatrics

The 1965 spring meeting of the Florida Pediatric Society was devoted entirely to business of the group. The fall meeting will be held November 11-14 at the British Colonial Hotel, Nassau, Bahamas. It will be largely a scientific session.

The faculty will consist of Drs. Jerold F. Lucey, associate professor of pediatrics, University of Vermont College of Medicine; Peter A. M. Auld, assistant professor of pediatrics, Cornell University Medical College; Donald V. Eitzman, associate professor of pediatrics, University of Florida College of Medicine; Samuel T. J. Giammona, associate professor of pediatrics, University of Miami School of Medicine, and Douglas Shanklin, associate professor of pediatrics and pathology, University of Florida College of Medicine.

Titles of program presentations will include "What's New in Neonatology," "The Importance of Early Caloric Intake in Prematures," "Experimental Production of Hyaline Membrane Disease," "Hyaline Membrane Disease —Recent Advances," "Respiratory Problems, Other Than Hyaline Disease," "Newborn Visual Diagnosis," "The Effect of Maternal Environment on the Newborn," "Physiologic Considerations in Newborn Resuscitation," and "The Fetus Vs. Drugs, Surgery and Bilirubin."

All interested physicians are invited to attend the meeting.

Another subject of considerable interest to pediatricians is testing for phenylketonuria (PKU) and other metabolic diseases. At the 1965 session of the Florida legislature a bill was introduced making such routine testing mandatory for all newborns in the state. Only through intensive effort on the part of the Florida Pediatric Society in conjunction with the Florida Medical Association was it possible to defeat this bill. At the time, the legislators who helped us said that if a good *voluntary* program were not made effective, a similar bill would be introduced and likely passed during the next session of the legislature.

Subsequently, the mental health committee of the society, with the cooperation of the FMA and the State Board of Health, has begun to actively implement a voluntary program. An advisory committee of the FMA to the State Board of Health composed of representatives of the pediatricians, general practitioners, pathologists, psychiatrists and hospitals met August 29 to organize this voluntary effort. All physicians in the state are urged to cooperate.

Richard G. Skinner Jr., M.D., Jacksonville

News

Dr. Paul S. Jarrett of Miami recently was elected chairman of the Advisory Council of the Florida Alcoholic Rehabilitation Program. A member of the council since 1958, Dr. Jarrett succeeds Dr. Burton C. Ostling of Avon Park in the chairmanship.

A postgraduate course entitled "Cerebral Palsy: Modern Concepts—Allied Disorders, Rehabilitation" will be held November 11-13 in St. Petersburg. Acceptable for 18 accredited hours by the American Academy of General Practice, the course will be jointly sponsored by the Mound Park Hospital Foundation, the department of medical education of Mound Park Hospital, the American Legion Children's Hospital, Bay Pines Veterans Administration Hospital and the Pinellas County Medical Society. Further details may be obtained by writing Cerebral Palsy, Mound Park Hospital Foundation, Inc., 701 Sixth Street South, St. Petersburg 33701.

A three day advanced course on "Initial Emergency Care and Transportation of the Sick and Injured" will be held December 10-12 at Bayfront Auditorium, Miami, under the sponsorship of the Committee on Injuries of the American Academy of Orthopaedic Surgeons. Open to ambulance attendants, firemen, policemen and various health personnel, registration for the course will be limited to 200 persons. The course will be under the direction of Dr. Wallace E. Miller, professor and chief of the Division of Orthopedic Surgery, University of Miami School of Medicine. Additional information may be secured by writing Dr. Miller in care of the American Academy of Orthopaedic Surgeons, 29 East Madison Street, Chicago, Illinois 60602.

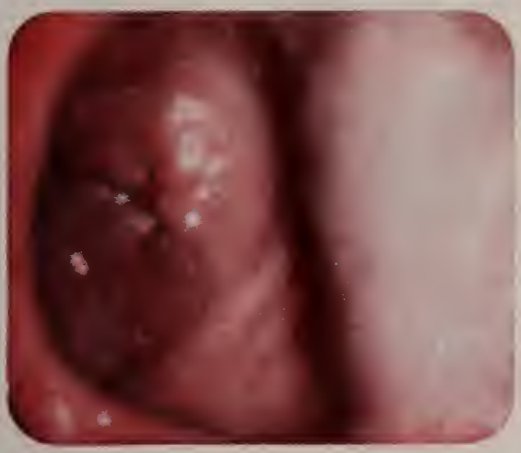
The twentieth annual Florida Midwinter Seminar of Ophthalmology and Otolaryngology will be held February 7-12, 1966, at the Americana Hotel, Bal Harbour, Miami Beach. Inquiries and advance registrations may be directed to Kenneth S. Whitmer, M.D., 550 Brickell Avenue, Miami 33132.

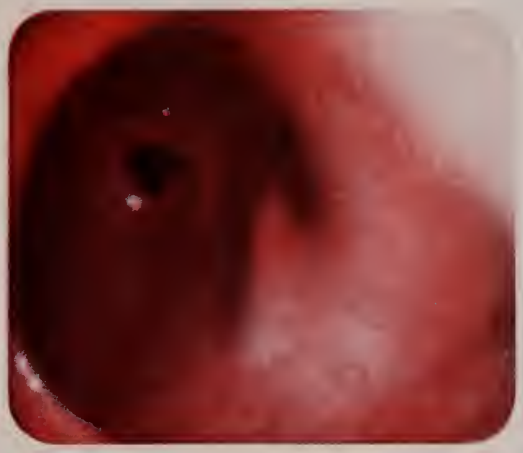
The University of Miami School of Medicine's Department of Radiology and Jackson Memorial Hospital will present a postgraduate seminar entitled "Current Status of Skeletal Roentgenology" March 16-19, 1966, at the Fontainebleau Hotel, Miami Beach. Details may be obtained from Raymond E. Parks, M.D., professor and chairman, Department of Radiology, School of Medicine, University of Miami, Jackson Memorial Hospital, Miami 33136.

In response to an urgent appeal to American Medicine by President Lyndon B. Johnson, the American Medical Association is assisting the recently formed voluntary organization known as Project Viet-Nam in supplying teams of physicians for 60 day service periods in South Viet-Nam. Administered by the People-to-People Health Foundation, Inc., the project was developed to help alleviate the critical shortage of physicians in that Southeast Asian nation. Although service is on a volunteer basis, transportation round trip via commercial airline, a nominal per diem, housing, meals and other needs will be supplied. Interested physicians may obtain further information and application forms by communicating with Project Viet-Nam, 2233 Wisconsin Avenue N.W., Washington, D.C. 20007, telephone 338-5730 or 338-6110.

The Fifty Year Club of American Medicine is composed of physicians who have "carried the little black bag" for more than half a century. It meets during the spring sessions of the American Medical Association. First president of the group was Dr. Walter C. Alvarez. Physicians interested in applying for membership in the unique organization should write J. H. McCurry, M.D., secretary, Fifty Year Club of American Medicine, Cash, Arkansas 72421.

The Duval County division of the Florida Chapter, Arthritis Foundation, will sponsor a postgraduate seminar in arthritis and related diseases November 13-14 at the Hotel George Washington, Jacksonville. Open to all physicians, the seminar will feature a nationally known faculty. Additional details may be obtained by contacting the division office, 563 Bishop Gate Lane, Jacksonville 32204, telephone 353-5261.





Intragastric photography studies[1]

A/ E. B., male, age 48. Normal antral contraction. Pyloric opening is not seen. It is difficult to differentiate a deep prepyloric contraction from a "pyloric fleurette" or true pylorus.

B/ Same subject after 6 mg. of propantheline bromide intravenously; antral contractions ceased. The pyloric orifice remained open and was easily identified. Better visualization of the antrum was also obtained.

Now you can see Pro-Banthīne® at work
(propantheline bromide)

Pro-Banthīne is so effective in anticholinergic action that it may be employed in visualizing the entire pyloric region.

In addition to the intragastric photographs, cinegastroscopic studies[2] have demonstrated graphically not only its effectiveness but the superiority of Pro-Banthīne over belladonna alkaloids.

Pro-Banthīne produced complete cessation of gastric, antral and pyloric motor activity with a dose of 6 mg. intravenously. This is approximately one-third the usual oral dose of 15 mg.

Atropine at full normal dosages did not produce such cessation. It required double the usual oral dose of atropine, 0.8 mg. intravenously, to duplicate the aperistaltic action of Pro-Banthīne. This dose of atropine produced pronounced discomfort and tachycardia with ventricular rates as high as 150 per minute.

It is this pharmacologic superiority of Pro-Banthīne which has made it the most widely prescribed anticholinergic in such conditions as peptic ulcer, functional hypermotility, irritable colon, pylorospasm and biliary dyskinesia.

Dosage—The maximal tolerated dosage is usually the most effective. For most *adult* patients this will be four to six 15 mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily. Pro-Banthīne (brand of propantheline bromide) is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type ampuls of 30 mg.

Side Effects and Contraindications—Urinary hesitancy, xerostomia, mydriasis and, theoretically, a curare-like action may occur. The drug is contraindicated in patients with glaucoma or severe cardiac disease.

1. Barowsky, H.; Greene, L., and Bennett, R.: Investigators' Clinical Report. Photographs courtesy of Drs. H. Barowsky, L. Greene and R. Bennett.
2. Barowsky, H.; Greene, L., and Paulo, D.: Paper read at Meeting of American Society for Gastrointestinal Endoscopy, Montreal, Canada, May 25-27, 1965.

SEARLE

Research in the Service of Medicine

"All Registered Nurses are Alike"

It stands to reason. They all go through the same training; they all have to pass the same tests: they all have to measure up to the same standards. Therefore, all registered nurses are alike.

That's nonsense, of course. But it's no more nonsensical than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

Bayer's standards are far more demanding. In fact, there are at least *nine specific differences* involving purity, potency and speed of tablet disintegration. These Bayer® standards result in significant product benefits including gentleness to the stomach, and product stability that enables Bayer tablets to *stay* strong and gentle until they are taken.

So next time you hear someone say that all aspirin tablets are alike, you can say, with confidence, that it just isn't so.

You might also say that all registered nurses aren't alike, either.

The discomforts of

DIARRHEA
MUCOUS COLITIS
DIVERTICULITIS
SPASTIC URETERITIS
BLADDER SPASM

. . . are relieved by direct musculotropic action with

Trocinate®

BRAND THIPHENAMIL HCl

Available in 100 milligram pink sugar-coated tablets.

The high therapeutic index permits dosage sufficient to relieve spasm promptly. The usual initial dose is 4 tablets. Maintenance dosage is usually one or two tablets 4 times a day.

Trocinate *BRAND* THIPHENAMIL HCl

BETA-DIETHYLAMINOETHYL DIPHENYLTHIOACETATE HYDROCHLORIDE

. . . directly relaxes smooth muscle spasm
. . . combats hypermotility
. . . non-mydriatic – may be used in glaucoma

Trocinate (Thiphenamil HCl) has been found in three clinical studies, (J. Mo. Med. Assoc., 48:685-6; Med. Rec. & Annals, 43:1104-6; J. Urol., 73:487-93), to be effective and to be free of side-effects. Fifteen years of wide clinical usage has affirmed the safety and effectiveness of Trocinate.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA

Manufacturers of ethical pharmaceuticals since 1856

WHEN MOTHER'S IRON ISN'T UP TO MOTHERHOOD

IN BRIEF: ACTIONS AND USES: A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency anemia may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion *as a source of iron;* infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. of elemental iron in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylactoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache, and fever have occasionally been reported. Initial test doses of 0.5 cc. are advisable.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only, it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

in iron deficiency anemia for rapid and predictable replacement of iron reserves

imferon®

(iron dextran injection)

LAKESIDE LABORATORIES, INC. • Milwaukee, Wisconsin 53201

DECASPRAY® brings cooling relief to burning, itching, and inflamed skin at a touch. Each can of DECASPRAY—held upright, upside down, or at any angle—can be used 133 times (1-second sprays) to control a variety of allergic and inflammatory skin disorders, and help prevent infection... to dry moist, oozing lesions.

The latest touch in cool topical steroid-antibiotic therapy is DECASPRAY....Each application leaves a uniform film that is odorless, colorless, stainless, and invisible. And, because dermatoses are sprayed—not handled—risk of spreading is lessened.

cooling spray...

SUPPLIED: In 90-Gm. seamless, pressurized cans, containing 10 mg dexamethasone 21-phosphate and 50 mg. of neomycin sulfate (equivalen to 35 mg. neomycin base).

ALSO AVAILABLE: DECADRON® Phosphate Topical Cream in 15 Gm. and 30-Gm. tubes. Each gram contains 1 mg. dexamethasone 21 phosphate as disodium salt.

NeoDECADRON® Topical Cream in 15-Gm. and 30-Gm. tubes. Eac gram contains 1 mg. dexamethasone 21-phosphate as disodium salt an 5 mg. neomycin sulfate (equivalent to 3.5 mg. neomycin base).

INDICATIONS: Dermatoses responsive to topical aerosol steroid-anti biotic therapy.

SIDE EFFECTS, PRECAUTIONS, AND CONTRAINDICATIONS Do not use in presence of tuberculosis of skin, chickenpox, herpes sim plex. Never spray into eyes or nose. Discontinue if infection does no respond promptly or sensitivity occurs.

Before prescribing or administering, read product circular wit package or available on request.

MERCK SHARP & DOHME | **where today's theory is tomorrow's therapy**
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immediate relief for itching and burning ski

Deaths

Cole, Joshua Kenneth, Coral Gables; born in Penn Yan, N. Y., Oct. 2, 1897; University of Michigan Medical School, 1923; served an internship and a surgical residency at Arnot Ogden Memorial Hospital; engaged in the general practice of medicine and surgery in Phelps, N. Y., from 1925 to 1939 and thereafter in Coral Gables; was a District Health Officer in New York State from 1930 to 1937; held membership in the American Medical Association, Southern Medical Association and American Academy of General Practice; died May 15, aged 68.

Gates, Kermit Hoyt, Coral Gables; born in Norwalk, Iowa, June 3, 1903; State University of Iowa College of Medicine, Iowa City, Iowa, 1930; interned at Fitzsimons Army Hospital, Denver; served a residency in general surgery at Fort Sill Army Hospital, Lawton, Okla., from 1931 to 1934; was awarded the D.P.H. degree by the University of California in Berkeley in 1949, with a major concentration in hospital administration; during World War II served in the Pacific theatre as a surgeon for the 24th Infantry Division and later as deputy theatre surgeon; served in the Army Medical Corps from 1930 to 1955 and was separated from military duty with the rank of colonel; was deputy commander of Walter Reed Army Hospital, Washington, D. C., at the time of his retirement; came to Miami in August 1955 as executive director of Jackson Memorial Hospital and three years later his duties were extended to include the entire hospital department of Dade County; held membership in the American Medical Association, American Public Health Association, Florida Public Health Association, Association of Military Surgeons, Association of American Medical Colleges, American Hospital Association and Florida Hospital Association, and was a fellow of the College of Hospital Administrators; died July 31, aged 62.

Tyler, Lockland Vance, Fitzgerald, Ga.; born in Fair Bluff, N. C., Sept. 15, 1885; Medical College of Georgia, Augusta, 1916; engaged in the general practice of medicine in Hephzibah, Ga., for nine years before locating in Jacksonville in 1926, where he practiced 28 years; returned to Georgia to reside upon his retirement in 1954; held membership in the American Medical Association and Southern Medical Association; died August 22 in a Pensacola hospital after a brief illness, aged 79.

Books Received

From Auscultation to Phonocardiography. By Aldo A. Luisada, M.D. Pp. 351. Illus. 196. Price $17.75. St. Louis, The C. V. Mosby Company, 1965.

Textbook of Obstetrics. By John C. Ullery, M.D., and Zeph J. R. Hollenbeck, M.D. Pp. 752. Illus. 295. Price $17.50. St. Louis, The C. V. Mosby Company, 1965.

Physiologic Foundations for Marriage Counseling. By Joseph B. Trainer, M.D. Pp. 287. Price $8.00. St. Louis, The C. V. Mosby Company, 1965.

Physical Examination of the Joints. By William P. Beetham, Jr., M.D., A.A.C.P., Howard F. Polley, M.D., M.S. in Medicine, F.A.C.P., Charles H. Slocumb, M.D., M.S. in Pathology, and Walt F. Weaver, M.D., M.S. in Medicine, A.A.C.P. Pp. 198. Illustrated. Price $7.50. Philadelphia, W. B. Saunders Company, 1965.

The Management of Fractures and Soft Tissue Injuries. By the Committee on Trauma, American College of Surgeons. Ed. 2. Pp. 365. Illustrated. Price $7.50. Philadelphia, W. B. Saunders Company, 1965.

Studies in Physiological Optics. By Melvin L. Rubin, M.S., M.D., and Gordon L. Walls, Sc.D. Pp. 125. Illustrated. Price $6.50. Springfield, Ill., Charles C. Thomas, Publisher, 1965.

Electrocardiography and Vectorcardiography: Instrumentation, Fundamentals, and Clinical Application. By Lawrence E. Lamb, M.D. Pp. 609. Illustrated. Price $17.00. Philadelphia, W. B. Saunders Company, 1965.

Surgery in America: From the Colonial Era to the Twentieth Century. Selected Writings. Edited by A. Scott Earle, M.D. Pp. 280. Illustrated. Price $8.50. Philadelphia, W. B. Saunders Company, 1965.

Obstetrics. By J. P. Greenhill, M.D., F.A.C.S., F.I.C.S. (Hon.), F.A.C.O.G. Ed. 13. Pp. 1246. Illus. 1296. Price $20.00. Philadelphia, W. B. Saunders Company, 1965.

Give and Take: The Biology of Tissue Transplantation. By Francis D. Moore, M.D. Pp. 216. Illustrated. Price $1.25. Garden City, N.Y., Anchor Books, Doubleday & Company, Inc., 1965.

Handbook of Physical Medicine and Rehabilitation. Edited by Frank H. Krusen, M.D. Associate Editors: Frederic J. Kottke, M.D., and Paul M. Ellwood, Jr., M.D. Pp. 725. Illustrated. Price $16.50. Philadelphia, W. B. Saunders Company, 1965.

Current Surgical Management III; a Book of Alternative Viewpoints on Controversial Surgical Problems. Editors: Edwin H. Ellison, M.D., Stanley R. Friesen, M.D., and John H. Mulholland, M.D. With Contributions by 104 Authorities. Pp. 519. Illustrated. Price $11.50. Philadelphia, W. B. Saunders Company, 1965.

THE DUVALL HOME for RETARDED CHILDREN

A home offering the finest custodial care with a happy home-like environment. We specialize in the care of infants, bed-ridden children and Mongoloids.

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MRS. A. H. DUVALL GLENWOOD, FLORIDA

1 2 3 METABOLIC BENEFITS

for the stable adult diabetic who is overweight and unresponsive to diet

1 DBI-TD LOWERS BLOOD SUGAR

...It promotes glucose utilization by the physiologic Embden-Meyerhof pathway but does not promote the conversion of glucose to storage fat.

2 DBI-TD REDUCES EXCESSIVE CIRCULATING INSULIN

...By lowering high blood sugar levels which stimulate oversecretion of insulin in these patients, DBI-TD promotes return of serum insulin levels toward normal.

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...By reducing the excessive release of insulin which promotes lipogenesis and suppresses fat mobilization, DBI-TD helps to control the formation of lipids and building of body fat, thus leads to gradual weight reduction.

timed-disintegration capsules 50 mg.

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Now in its seventh year of clinical use, DBI-TD is considered the "drug of choice" for the ketoacidosis-resistant (stable adult) diabetic who is overweight and unresponsive to diet alone. Anorexia has been suggested as a possible basis for weight loss; however, controlled clinical studies suggest that it is due to the mechanism of drug action. Comparable dosages of DBI-TD do not induce weight loss or lower blood sugar in nondiabetic subjects. For the ketoacidosis-prone diabetic, insulin is still the essential hypoglycemic agent.

Dosage: 1 to 3 capsules daily. **Side Effects:** Gastrointestinal, occurring more often at higher dosage levels, abate promptly upon dosage reduction or temporary withdrawal. **Precautions:** Occasionally an insulin-dependent patient will show "starvation" ketosis (acetonuria without hyperglycemia) which must be differentiated from "insulin-lack" ketosis which is accompanied by acidosis, and treated accordingly. Lactic acidosis has been reported in nondiabetics and diabetics treated with insulin, with diet, and with DBI. Question has arisen regarding possible contribution of DBI to lactic acidosis in patients with renal impairment and azotemia and also those with severe hypotension secondary to myocardial or bowel infarction. Periodic B. U. N. determinations should be made when DBI is administered in the presence of chronic renal disease. DBI should not be used when there is significant azotemia. Any cardiovascular lesion that could result in severe or sustained hypotension, which may itself lead to development of lactic acidosis, should be considered cause for immediate discontinuation of DBI at least until normal blood pressure has been restored and is maintained without vasopressors. Should lactic acidosis occur from any cause, vigorous attempts should be made to correct circulatory collapse, tissue hypoxia, and pH. **Contraindications:** Severe hepatic disease, renal disease with uremia, cardiovascular collapse. Not recommended without insulin in acute complications of diabetes (metabolic acidosis, coma, severe infections, gangrene, surgery). **Pregnancy Warning:** *During pregnancy, until safety is proved, use of DBI like other oral hypoglycemic drugs, is to be avoided.*

Consult product brochure.

Also available: DBI tablets 25 mg.

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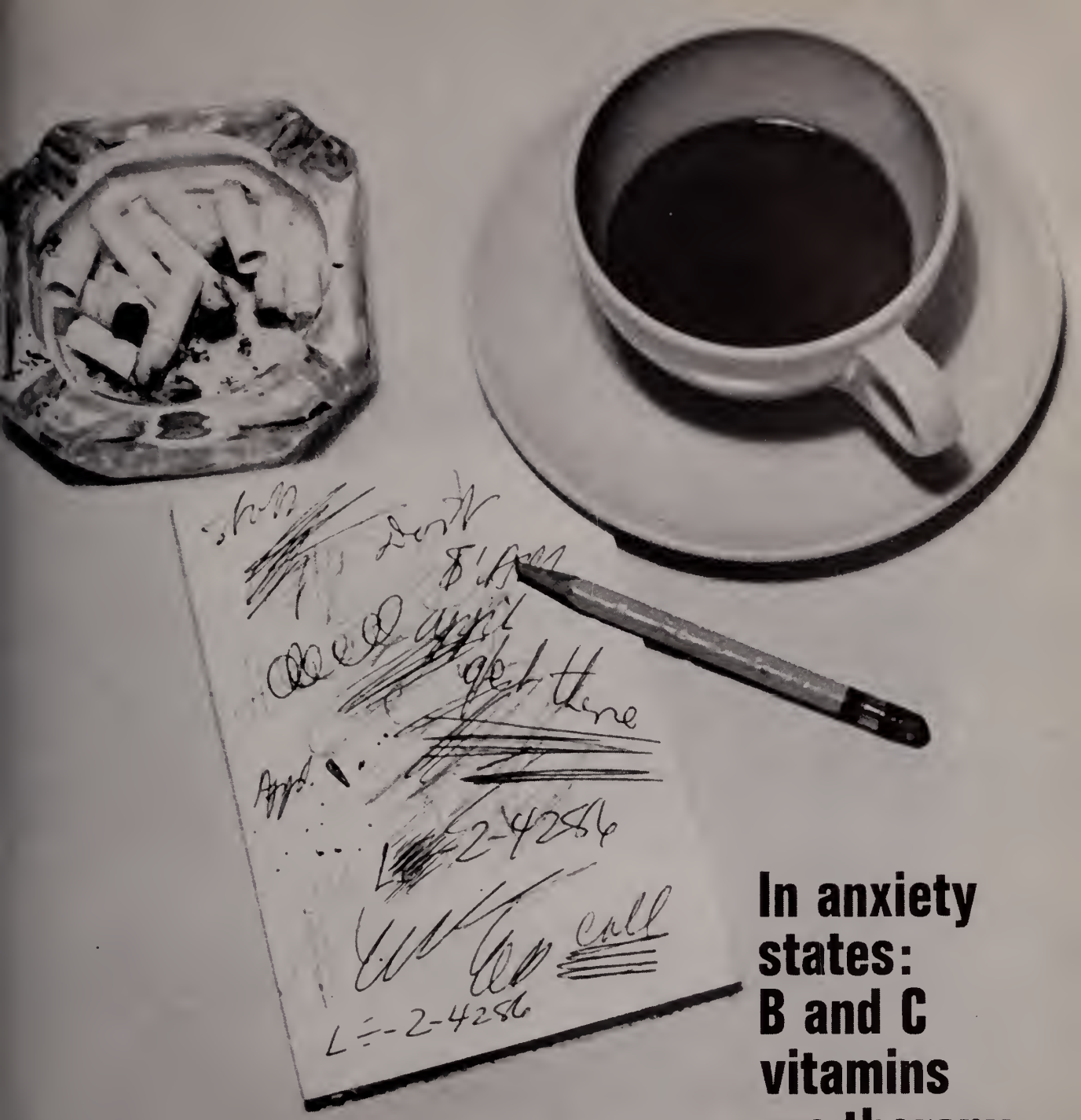
800 Second Avenue, New York, N.Y. 10017



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Stress formula vitamins are an important supportive measure in maintaining the nutritional status of the emotionally disturbed patient. With STRESSCAPS, B and C vitamins are present in therapeutic amounts to meet increased metabolic demands. Patients with anxiety, and many others undergoing physiologic stress, may benefit from vitamin therapy with STRESSCAPS.

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Each capsule contains:

Vitamin B_1 (as Thiamine Mononitrate)	10 mg.
Vitamin B_2 (Riboflavin)	10 mg.
Niacinamide	100 mg.
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Vitamin B_{12} Crystalline	4 mcgm.
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Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

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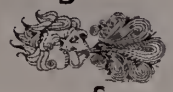
Some people get away from colds and sinusitis



by getting away from frigid weather

. . . but if your patient can't get away, relieve sneezing, running nose, and congestion of colds and sinusitis all day or all night with one

ORNADE® SPANSULE® CAPSULE

Trademark brand of sustained release capsule

Each capsule contains 8 mg. of Teldrin® (brand of chlorpheniramine maleate), 50 mg. of phenylpropanolamine hydrochloride, and 2.5 mg. of isopropamide, as the iodide.

Summary of contraindications, cautions and side effects: Do not use in patients with glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal obstruction or bladder neck obstruction. Use with caution in the presence of hypertension, hyperthyroidism, or coronary artery disease. Drowsiness; excessive dryness of nose, throat or mouth; nervousness or insomnia may occur on rare occasions but usually are mild and transitory.

Before prescribing, see SK&F product Prescribing Information.

Smith Kline & French Laboratories SK&F

Anatomy of
Low Back Pain #1

the sedentary life is often the seat of low back pain

The human spine is not engineere
prolonged sitting at desks, pianos,
writers and drafting boards. The stre
set up by the heavy, forward-tilted
and trunk, balanced precariously o
insufficient base, result in strain o
dorsal musculature, particularly a
low lumbar level.

The unusual muscle-relaxant and
gesic properties of 'Soma' make it e
cially useful in the treatment of low
sprains and strains. 'Soma' is wi
prescribed ☐ **to relieve pain** ☐ **to**
muscles ☐ **to restore mobility.**

Indications: 'Soma' is useful for manageme
muscle spasm, pain, and stiffness in a vari
inflammatory, traumatic, and degenerative m
loskeletal conditions. It also may act to norn
motor activity in certain neurologic disturba

Contraindications: Allergic or idiosyncratic
tions to carisoprodol.

Precautions: 'Soma', like other central ne
system depressants, should be used with ca
in patients with known propensity for takin
cessive quantities of drugs and in patients
known sensitivity to compounds of similar c
cal structure, e.g., meprobamate.

Side Effects: The only side effect reported wit
frequency is sleepiness, usually on higher
recommended doses. An occasional patient
not tolerate carisoprodol because of an indiv
reaction, such as a sensation of weakness.
rarely observed reactions have included dizzi
ataxia, tremor, agitation, irritability, headach
crease in eosinophil count, flushing of face,
gastrointestinal symptoms.

One instance each of pancytopenia and l
penia, occurring when carisoprodol was a
istered with other drugs, has been reported, a
an instance of fixed drug eruption with carisop
and subsequent cross reaction to meprobar
Rare allergic reactions, usually mild, have incl
one case each of anaphylactoid reaction with
shock and angioneurotic edema with respir
difficulty, both reversed with appropriate the
In cases of allergic or hypersensitivity react
carisoprodol should be discontinued and appr
ate therapy initiated. Suicidal attempts may
duce coma and/or mild shock and respir
depression.

Dosage: Usual adult dose is one 350 mg. t
three times daily and at bedtime.

Supplied: Two Strengths: 350 mg. white ta
and 250 mg. orange, two-piece capsules.

Before prescribing, consult package circular.

for the relief of low back sprains and strain

SOMA
(CARISOPRODO

Wallace Laboratories, Cranbury, N
265

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GENERAL PRACTITIONER or INTERNIST for long established clinic group. Contact T. C. Kenaston Jr., M.D., Kenaston Clinic, 501 Delannoy Ave., Cocoa, Fla.

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GENERAL PRACTITIONER: Wanted to join two man partnership in small South Florida coastal city. Good opportunity, busy practice with complete laboratory. Contact PM Florida, 12490 N.E. 7th Ave., Miami. Phone 751-2101.

PHYSICIAN NEEDED NOW: Nearest doctor 23 miles. Over 4,500 people in area. Quiet agricultural community. Air-conditioned office, rent free. Contact W. G. Croft, Jr., Rotary Club, Mayo, Florida.

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HOUSE PHYSICIANS: Six required for immediate openings. Accredited voluntary 375 bed general hospital located in the metropolitan area. $600.00 per month plus maintenance. Send resume to Medical Director of St. Mary Hospital, Hoboken, New Jersey —SW 2-3300.

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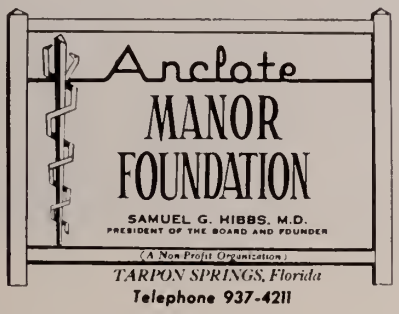
The Florida Medical Association offers placement assistance through the Physician Placement Service, P. O. Box 2411, Jacksonville 32203. This service is for the use of physicians seeking locations, as well as physicians seeking associates and is without charge.



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Norpramin is a rapid-acting specific drug for the treatment of depression. Depressive signs and symptoms—sometimes described as "mental pain"—typically begin to improve in 2-5 days. Patients are more hopeful, less empty and less weighed down by their troubles. Norpramin has only slight sedative qualities, nevertheless anxiety *secondary to depression* is frequently relieved as depression is lifted. If anxiety or tension persists it can be controlled by adding a tranquilizer or by reducing dosage. Norpramin is not a MAO inhibitor. Side effects are usually mild.

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Optimal results are obtained at a dosage of about 150 mg./day—two 25 mg. tablets t.i.d. After achieving optimal results, a maintenance dose (50-100 mg./day) should be sought.

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IN BRIEF:

Indications: In depression of any kind—neurotic and psychotic depressive reactions; manic-depressive or involutional psychotic reactions.

Contraindications and Precautions: Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Safety in human pregnancy has not been established.

Adverse Effects: Side effects, usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste," sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs.

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In tension headache
premenstrual tension and dysmenorrhea

Side effects such as gastric distress, occasional weakness, sedation or dizziness may be noted. Ordinarily, these may be reversed by a reduction in dosage or temporary withdrawal of the drug. TRANCO-GESIC should not be administered to persons known or suspected to have an idiosyncrasy to acetylsalicylic acid.

Dosage for adults is usually 2 tablets three or four times daily, the suggested dosage for children from 5 to 12 years is 1 tablet three or four times daily.

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Warning: With administration of enteric-coated potassium supplements, the possibility of small bowel lesions should be kept in mind.
Precautions: Reduce dosage of concomitant antihypertensive agents by at least one-half. Discontinue if the BUN rises or liver dysfunction is aggravated. Electrolyte imbalance and potassium depletion may occur; take special care in cirrhosis or severe ischemic heart disease, and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.
Side Effects: Agranulocytosis, constipation, dizziness, dysuria, headache, hyperglycemia, hyperuricemia, impotence, leukopenia, muscle cramps, nausea, postural hypotension, purpura, thrombocytopenia, transient myopia, urticaria, vomiting and weakness.
Average Dosage: One tablet (100 mg.) daily with breakfast.
Availability: Tablets of 100 mg. in bottles of 100 and 1000.
For full details, see the complete prescribing information.

*Dorhout Mees,E.J.,and Geyskes, G.G.: Acta med.scandinav. 175:703,1964.

Photos: A 59-year-old woman with hypertensive cardiovascular disease and edema resistant to low-salt diet and bed rest. The patient lost 8½ lbs. in one week with a single tablet daily of Hygroton, brand of chlorthalidone.

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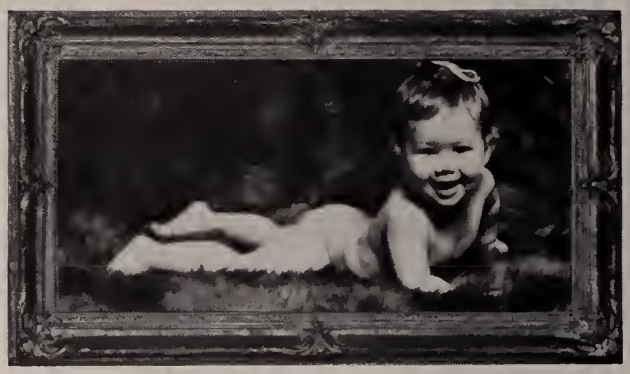

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1—Pomeranze, J., and Gadek, R.J.: Am. Pract. & Digest Treat. *8*:73-77 (Jan.) 1957

2—Asher, L.M.: Am. J. Digestive Diseases *4*:272 (Apr.) 1959

PIPTAL®

(pipenzolate bromide)

PIPTAL®-PHB

(phenobarbital, 16 mg., pipenzolate bromide, 5 mg.)

IN BRIEF: PIPTAL—Each tablet contains 5 mg. pipenzolate bromide, PIPTAL-PHB—Each tablet (or 5 cc. of elixir) contains phenobarbital (warning: may be habit forming) 16.0 mg., Piptal (pipenzolate bromide) 5 mg. The elixir contains alcohol 20%.

Side Effects: Dry mouth, blurring of vision or drowsiness may occur.

Contraindications: Withhold in glaucoma, bladder or g.i. obstruction, cardiac arrhythmias and in sensitivity to anticholinergics or phenobarbital (Piptal-PHB). Caution should be observed in patients with prostatic hypertrophy.

Administration and Dosage: PIPTAL or PIPTAL-PHB Tablets: One tablet three times a day before meals and one or two tablets at bedtime. (PIPTAL-PHB Elixir: One teaspoonful three or four times daily for adults and children over six years of age.)

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DOSAGE: Diuresis, initially 50 to 200 mg.; maintenance 25 to 150 mg., daily. Hypertension 50 to 100 mg. initially, adjusted to 50 mg. t.i.d. or downward to minimal effective dosage level.

PRECAUTIONS AND SIDE EFFECTS: Electrolyte imbalance with hypokalemia, hypochloremic alkalosis and hyponatremia may occur. Other reactions may include blood dyscrasias, hyperuricemia and gout, nausea, jaundice, anorexia, vomiting, diarrhea, dizziness, paresthesia, photosensitivity and headache. Insulin requirements may be altered in diabetes.

WARNINGS: Dosage of coadministered antihypertensive agents should be reduced by at least 50%. Use with caution in edema due to renal disease; advanced hepatic disease or suspected presence of electrolyte imbalance. Stenosis or ulcer of small intestine have been reported with coated potassium formulas and should be administered only when indicated. Until further clinical experience is obtained, the use of the drug in pregnant patients should be carefully weighed against possible hazards to the fetus.

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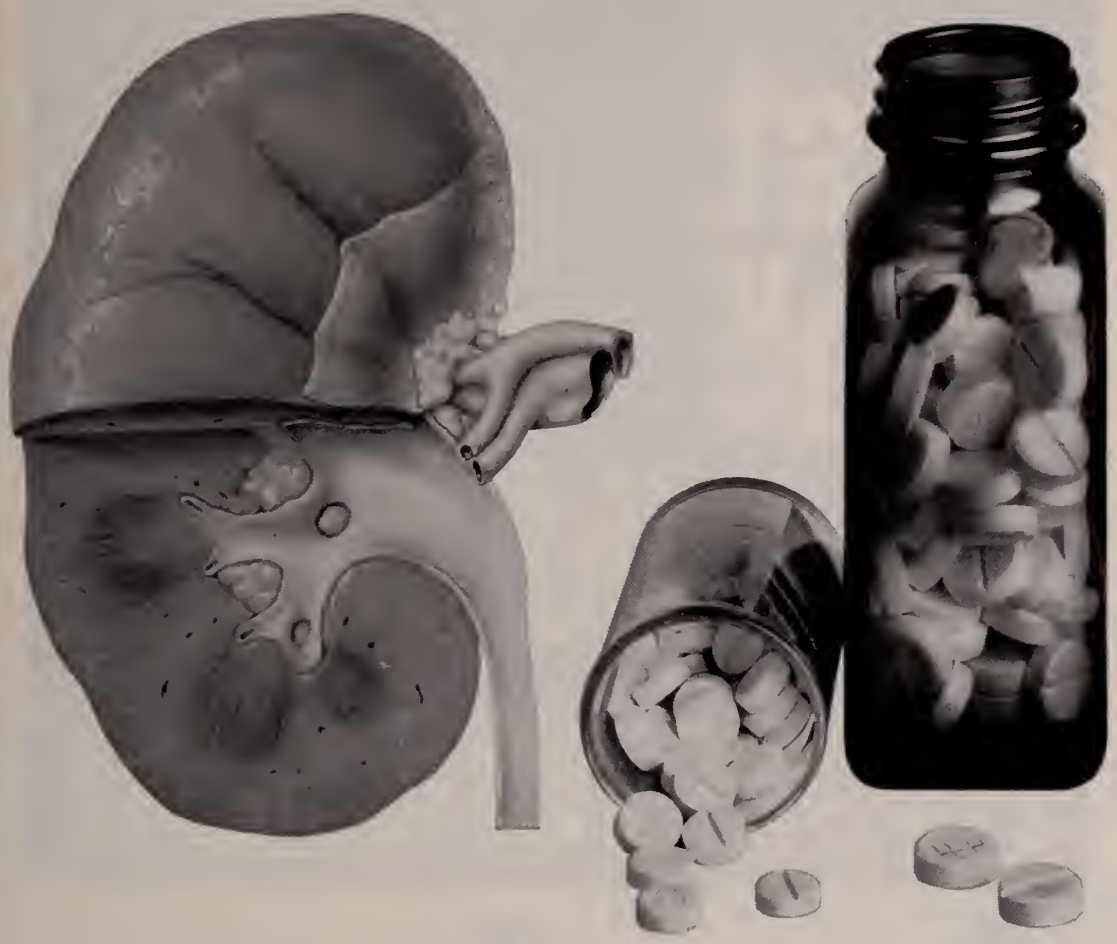

understanding... precedes development

The development of chlorothiazide and probenecid were events of major importance, but perhaps even more important for the future was the Renal Research Program by which they were developed. When Merck Sharp & Dohme organized this program in 1943, it was expressing in action some of its basic beliefs about research:

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(1) Frykman, H.M.: Minn. Med., Vol. 38, Jan. 1955. (2) Poth, E.J.: The J.A.M.A., Vol. 163, No. 15, April 13, 1957. (3) McGivney, J.: Texas State Jour. of Med., Vol. 51, No. 1, Jan. 1955. (4) Stern, F. H.: Jour. of The Amer. Ger. Soc., Vol. 11, No. 3, Mar. 1963. (5) Weekes, D. J.: N.Y. State Jour. of Med., Vol. 58, No. 16, Aug. 1958. (6) Abbott, P.L.: Jour. of Oral Surg., Anes. & Hosp. Dental Serv., Vol. 19, July 1961. (7) Weekes, D. J.: E.E.N.T. Digest, Vol. 25, No. 12, Dec. 1963.

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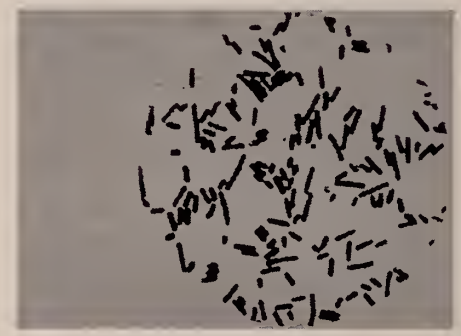

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not tolerate carisoprodol because of an i
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rarely observed reactions have included d
ataxia, tremor, agitation, irritability, head
crease in eosinophil count, flushing of fa
gastrointestinal symptoms.

One instance each of pancytopenia an
penia, occurring when carisoprodol was
istered with other drugs, has been reporte
an instance of fixed drug eruption with cari
and subsequent cross reaction to mepro
Rare allergic reactions, usually mild, have i
one case each of anaphylactoid reaction w
shock and angioneurotic edema with res
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Side effects: Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses. Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstituted. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

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1. Torosdag, S., Schvartz, N., Fletcher, L., Fertig, H., Schwartz, M. S., Quan, R. F. B., and Bryant, J. M., Pargyline Hydrochloride as an Antihypertensive Agent With and Without A Thiazide, Am. J. Cardiol., 12:822, Dec., 1963.

2. Pollack, P. J., Pargyline Hydrochloride and Methyclothiazide Combined In The Treatment of Hypertension, Cur. Thera. Res., 7:10, Jan., 1965.

3. Bryant, J. M. et al., Antihypertensive Properties of Pargyline Hydrochloride, New Non-Hydrazine Monoamine Oxidase Inhibitor Compared with Sulphonamide Diuretics, J.A.M.A., 178; 406, Oct., 1961.

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WARNINGS: Pargyline hydrochloride is a monoamine oxidase inhibitor. Patients should be warned against eating cheese, and using alcohol, proprietary drugs or other medication without the knowledge of the physician. When it is necessary to administer alcohol, narcotics (notably meperidine), antihistamines, anesthetics, barbiturates and other hypnotics, sedatives, tranquilizers, or caffeine, these agents can be used cautiously at a dosage of ¼ to ⅕ the usual amount. Avoid parenteral administration where possible. Withdraw pargyline two weeks before elective surgery.

Patients should be warned about the possibility of postural orthostatic hypotension. Those with angina or other evidence of coronary disease should not increase physical activity. Pargyline may lower blood sugar. Potassium depletion is unlikely at the recommended dosage, but if it occurs, adjust dosage or withdraw or provide added natural food sources of potassium; potassium tablets should be avoided wherever possible, as bleeding or obstructive ulceration of the small bowel has been associated with their use; potassium levels should be especially watched if the patient is on digitalis or steroids, or if hepatic coma is impending.

PRECAUTIONS: When determining the antihypertensive effect of Eutron, blood pressure should be measured while the patient is *standing*. Use with caution in hyperactive or hyperexcitable persons. Such persons may show increased restlessness and agitation. Withdraw drug during acute febrile illness. Watch patients with impaired renal function for increasing drug effects or elevation of BUN and other evidence of progressive renal failure; withdraw drug if such alterations persist and progress. Pargyline has not been shown to cause damage to body organs or systems. As with all new drugs, complete blood counts, urinalyses, and liver function tests should be performed periodically. The drug should be used with caution in patients with liver dysfunction. With prolonged therapy, examine patients for change in color perception, visual fields, and fundi.

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The JOURNAL
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Poisoning From Plant Ingestion

Ray O. Edwards Jr., M.D.
JACKSONVILLE

The toxicity of some plants has been recognized since ancient times and was probably known by prehistoric man who consumed the flora around him in his everyday diet. Little has been written, however, of the causes and results of ingestion of poisonous plants in a large group of persons.

The purpose of this paper is to analyze the reports of poisonous plant ingestions from the Poison Control Centers of Florida for the last four years. An attempt will be made to determine what toxic plants, and what portion of them, are most frequently eaten. Detailed consideration of the symptomatology and epidemiology of their ingestion wil be made. As might be anticipated, nearly all of the cases involved children. In many cases the poisoning was followed by a home visit by a public health nurse who often provided information of value for the report.

In the interval studied there were 430 reports of poisoning from trees, shrubs and other plants (table 1). Two known deaths occurred in this series. Symptoms developed in at least 41% of the patients before they were seen by a doctor and 18% were admitted to a hospital, usually for one to three days.

Toadstools

Exact identification of the heterogenous mushroom or toadstool poisonings was rarely accomplished. Some common fungi are harmless and even edible, but since there is no accurate guide to the Florida mushrooms,[1] it is imperative to treat them all as poisonous. The need for this precaution was further proved by the difference in reaction in different patients. Some appear to have suffered no ill effects even though treatment

Table 1.—Plant poisonings in Florida 1960-1964

Plant Family	Total Ingestions	Number with Symptoms	Admitted to Hospital	Geographic Location
Mushroom or toadstool	67	14	11	Statewide
Elephant's ear and dumb cane	51	32	1	Statewide
Castor bean	39	28	23	Statewide
Rosary pea	35	5	4 (1 death)	Central and South Florida
Lantana	33	6	9 (1 death)	Statewide
Nightshade	30	3	2	North and Central Florida
Jatropha spp.	24	22	14	South Florida
Tung nut	20	19	4	North-central and West Florida
Pokeweed	19	6	4	Statewide
Rattlebox	12	9	0	North Florida
Oleander	10	4	1	Statewide
Holly	9	0	1	Statewide
Euphorbia spp.	8	5	0	Statewide
Day cestrum	5	0	1	South Florida
Sandbox tree	4	4	0	South Florida
Coral tree	4	4	0	South Florida
Miscellaneous (25 species)	42	11	3	
Unidentified	18	6	3	
Total	430	178	81	

was delayed for an hour or longer, while at least two patients became ill within minutes following ingestion. Several children had severe symptoms and required hospitalization after eating one toadstool or less, and one adult required intravenous fluids after eating "one bite." The usual symptoms were nausea, vomiting, and abdominal pain, with one patient becoming cyanotic and another having a convulsion followed by stupor.

Further examination of the cases of ingested fungi showed that the majority occurred during the summer months, particularly August and September. Moreover, all patients except one who had symptoms, and all patients who required hospital admission, were seen during the months from June through November. These are the months when the common poisonous yard mushroom, the greengill, Lepiota morgani, is present and suggest that this fungus may cause a large part of the poisoning in this state, as has been suggested previously.[1, 2] Many of these incidents involved small children who were observed by their mother when eating the fungus and had prompt treatment within minutes, so that poisoning was prevented.

Dumb Cane and Elephant Ear

As shown in table 1, many children chewed the leaves, stalks or tubers of the elephant's ear, Colocasia antiquorum, dumb cane, Dieffenbachia picta, and related aroids. In a large number of these children symptoms developed, but only one child was hospitalized, apparently for observation. Symptoms were limited largely to burning of the tongue, mouth and perioral structures. These symptoms were more like those caused by a local irritant than a systemic poison. Laryngeal edema with respiratory difficulty has been reported,[3] but no symptoms of that severity were described in this series. A few children reported burning of the skin as well as mucous membranes, and several vomited spontaneously, presumably because of the irritating effect. In some children symptoms developed from only a "bite" or "taste," while in others who ate a "few pieces" of the leaves or stem no apparent difference in the severity of the reaction was observed.

Rosary Pea

The children who ingested the jequirity bean or rosary pea, Abrus precatorius, without ensuing symptoms were most fortunate and probably proof of the statement that children do not chew their food well. This weed, which grows wild in southern Florida, may be the state's most toxic plant. One well chewed pea can be sufficient to kill an adult.[4] The mature dry pea has a hard coat, however, and if not cracked or chewed, will pass harmlessly through the entire intestinal tract. It must have done so in some patients since they were not treated until several hours after the ingestion occurred. Five of the children vomited, and one child had vomiting and diarrhea with some lethargy and pallor, but recovered without treatment. Another two and one-half year old girl vomited after ingesting the seeds, but was not seen until two days later when she had a high fever and a convulsion followed by coma, renal shutdown with azotemia, pulmonary edema and death. A delay of two or three days before onset of severe symptoms is not unusual.[2,3] The toxicity is said to be greatly increased if the material is injected, as in pricking a finger while drilling these seeds for stringing as a necklace.[2]

Nightshade

The black nightshade, Solanum nigrum, often called deadly nightshade, is the most common cause of poisoning in this family of plants and was the only member of the nightshade family recorded in this series. The unripe green berry is toxic and the berries become less toxic as they ripen and turn black.[4] Vomiting was the only symptom recorded and no child in this group was seriously ill. Whether the patients ate the ripe or immature berries is not known. Headache and flushing were noted during an "epidemic" of nightshade ingestion in Jacksonville in 1959, but again all the children were treated promptly and none was seriously ill.

Lantana

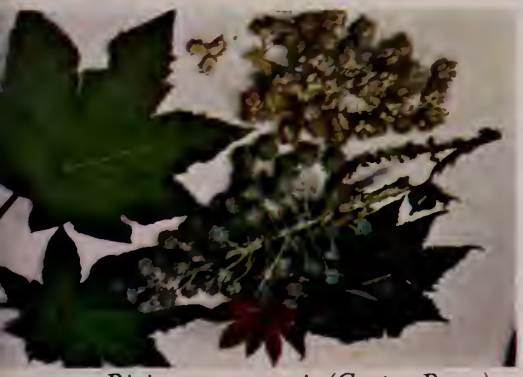
Lantana, Lantana camara, is a common garden plant and a statewide weed, but the majority of the poisoning episodes occurred in Hillsborough County for reasons that are not clear. Wolfson and Solomon[5] reported a series of 17 cases (most of which are included in this report) of lantana poisoning in Tampa from eating the berries, mostly green, unripe berries. Four of the children were ill and one child died. These children, as well as a few seen elsewhere in the state, exhibited the symptoms of lethargy, vomiting, diarrhea, weakness, labored and slow respirations, dilated pupils, depressed tendon reflexes and cyanosis. The child who died was comatose with pinpoint pupils and expired two and one-half hours after the onset of symptoms and eight hours after ingesting the berries. Two small children passed the berries in their stools without symptoms; one of these was

Lepiota morgani (Greengill)

Solanum nigrum (Black Nightshade)

Lantana camara (Lantana)

Jatropha multifida (Coral Plant)



Ricinus communis (Castor Bean)

Abrus precatorius (Rosary Pea)

noted to have eaten ripe berries. It appears that the berry is not digested if it is swallowed whole and the ripe berries are not toxic.[11]

Pokeweed

Most of the children ingesting pokeweed berries, Phytolacca americana, were lavaged promptly and apparently suffered no serious effects. Vomiting and lethargy were reported. Two children vomited less than one hour after consuming the berries. One of these, a four year old, said afterward that he ate only one berry. One adult who ate the root of this plant was more seriously ill. This effect is expected since the root and stalk are more toxic than the berries.[4]

Coral Plant, Physic Nut and Bellyache Bush

The Jatropha genus in Florida includes the coral plant, Jatropha multifida, physic or Barbados nut, J. curcas, and the bellyache bush, J. gossypifolia, and is found primarily in the southern part of the state. All of these fruits are severe irritants, and the symptoms were those of intestinal irritation—vomiting, abdominal pain and diarrhea progressing to hemorrhagic enteritis and collapse in the most severe cases. Symptoms seemed to start 45 minutes to three hours after ingestion and followed the ingestion of as little as one seed or fruit in many cases.

Castor Bean and Tung Nut

The castor bean, Ricinus communis, was eaten by children in widely separated parts of the state. Many people know this plant as the source of castor oil, a mild cathartic, and do not realize that the oil must be separated and purified before it is safe.[2,4] The poisonous principle, ricin, is a severe intestinal irritant and the symptoms reported were nausea, vomiting, abdominal pain and diarrhea. One teenager had symptoms after eating only three seeds. A 10 year old girl, so ill that she required intravenous fluids, reported that the seeds tasted like Brazil nuts.

The patients with tung nut, Aleurites fordii, poisoning were from Alachua and Marion counties and west through Leon and Escambia counties. The tung tree is an import from the Far East and is found primarily in groves in North-central Florida. Poisoning from tung nuts is well known in the endemic area and has been previously studied.[7] The toxic ingredient is a saponin which causes intestinal irritation, sometimes severe and progressing to prostration and dehydration. All of the patients reported here had vomiting plus other intestinal symptoms, and four required hospitalization. Many of the victims had eaten only one or two nuts, and one adult was reported to be in some degree of shock one hour after eating less than one nut. These nuts have a good flavor which gives some people confidence that they must be edible. These cases probably represent only a portion of this problem. A letter from the Archbold Memorial Hospital in Thomasville, Ga., states that several northbound tourists from Florida are treated every year for the after effects of having sampled tung nuts.[6]

Purple Rattlebox

The purple rattlebox or false poinciana, Daubentonia longifolia, is found in North Florida and is often confused with royal poinciana, Delonix regia, a tree found in South Florida only. All reported cases are from Orlando and Tampa north, the majority from Duval County. The seeds of the plant are apparently the toxic part, and the number necessary to cause symptoms as well as whether they must be chewed to cause a deleterious effect is not fully known. Over half of the patients had symptoms, primarily vomiting and abdominal pain, but none had to be admitted to a hospital. One girl vomited after eating a handful of the flowers.

Oleander

Despite the ubiquitous growth of the oleander, Nerium oleander, in the state, only 10 reports involved this shrub. Three of the patients ingested blossoms, the most attractive part of this plant to a child, and one of them vomited. One other child was dizzy and three complained of a burning mouth after chewing on the stems and leaves. These few cases with minimal symptomatology are in contrast to the fearsome reputation, which is well deserved, of the oleander. Probably the widespread knowledge of its toxicity and the general unattractiveness and bad taste of the stiff leaves are responsible. The toxic glucosides of the plant are chemically related to digitalis. Symptoms such as gastroenteritis, irregular heart rate, marked mydriasis, coma and respiratory paralysis have been reported from this plant.[3]

Poinsettia and Related Plants

The genus Euphorbia has several species in Florida with toxic potentialities. This group includes the poinsettia, Euphorbia pulcherrima, pencil tree or milkbush, E. tirucalli, crown of thorns, E. milii, and candelabra cactus, E. lactea. Some of these plants occur statewide, others are limited to South Florida. One adult squirted the

sap of a pencil tree in his eye and this produced burning and erythema. Another person had a skin rash from the juice of the same plant. Of the five children who sampled various parts of the poinsettia, two vomited spontaneously, but none required hospitalization.

Holly, Day Cestrum and Coral Tree

Several children, whose stomachs were evacuated promptly, ingested holly berries, Ilex spp., without any evidence of ill effects. The berries are considered toxic by all authorities, and vomiting and central nervous system depression may occur.[8]

The day cestrum, Cestrum diurnum, is found in South Florida, and Morton[2] reported symptoms of atropine-like activity following ingestion of some quantity of the fruit. None of these five patients reported in this survey was said to have had any symptoms.

The few children who ingested seeds of the coral tree, Erythrina variegata, another South Florida ornamental tree, vomited and one had diarrhea. The plants contain primarily saponin as well as other toxic ingredients.[9]

Miscellaneous Group

Among the 42 poisonings in this group several are worth noting. Two children ate the fruit of the yellow oleander, Thevetia nereifolia, and experienced vomiting and diarrhea severe enough to require hospital admission. This nut (called "lucky nut") contains a toxic glucoside resembling digitalis.[3] Another teenage boy had similar symptoms plus abdominal pain and required a short hospital stay after eating three chinaberries, Melia azedarach. Each of three boys in Miami ate four to six seeds of the sandbox tree, Hura crepitans, and had nausea, abdominal pain and diarrhea. The toxic principle of this South Florida tree is hurin, which produces enteric symptoms.[2] Two Jacksonville boys experienced vomiting and abdominal pain after eating an unknown number of beans from the coffeeweed or bagpod, Glottidium vesicarium. These seeds contain saponin.[7]

In addition there have been accidents in Florida involving the flowers and seeds of the angel's trumpet, Datura suaveolens. This plant is in the same genus as the well known Jimson weed, D. stramonium. Angel's trumpet, and all the plants of the genus Datura, produce the same symptoms as scopolamine poisoning including confusion, flushing, dizziness and dilated pupils.[3]

Other plants that are considered toxic are found in Florida, but are not represented in this series. Some of the more common of these are larkspur, Delphinium spp., hydrangea, Hydrangea macrophylla, chalice vine, Solandra longiflora* and yellow jasmine, Gelsemium sempervirens.[2,3]

Discussion

Under what seems to be superficially the same set of circumstances one child may ingest a portion of a toxic plant and become acutely and sometimes deathly ill, while another will not appear ill or have symptoms so mild that medical attention is not sought. Of the many variables that account for this paradox the most important are: whether the agent was actually swallowed or merely put into the mouth, the quantity taken, whether the stomach was empty or full, variations in toxicity of individual plants within the same species, variable reactions among persons to the toxic agent, whether the stomach was emptied by vomiting or lavage, and of course, the size and state of health of the patient.

Treatment

The best therapy is prevention of absorption by induced emesis or gastric lavage as promptly as possible after ingestion. Since the rate of absorption is variable, emesis may be helpful for several hours after ingestion. After absorption occurs, therapy is symptomatic. It is hoped that more specific therapy will be developed soon.

Epidemiology

In this series 9% of the poisoning occurred inside the house, 58% in the home yard, 22% in the neighbors' yards and adjacent vacant lots, and only 11% at more distant sites. Only a few instances were known to occur on camping trips or "out in the woods." The toxic native woodland and marsh plants, therefore, are largely not represented in this survey, and the plants and shrubs used commonly in home plantings are frequent causes of trouble.

When the portion of the plant ingested could be determined, 79% were berries, seeds, nuts or other colorful reproductive parts, 12% were leaves (mostly the elephant's ear-dumb cane group), 3% were stems and stalks, 3% were flowers, 2% were roots and 1% was sap of the plant.

The age range of patients in the series extends from an infant of nine months to adults who became poisoned through ignorance or mistaken identity of the plant or berry. No significant difference in the sexes was involved. Only 6% of the

*Poisoning from the chalice vine, Solandra longiflora, has occurred in Dade County. The symptoms were similar to a mild atropine or scopolamine intoxication.[11]

patients were Negro as compared with a total of 12 to 14% Negro patients represented in overall poison reports from this state.[10] Since over 80% of these Negro patients had symptoms when first seen, it is thought that the plant ingestion was largely ignored until the child became ill and that the true incidence is probably about the same as among white children.

Ninety per cent of the children who sampled toadstools were under four years of age and 40% were under the age of two years. This same finding is largely true of the children who ingested elephant ear or dumb cane, common yard and house plants. In the other plant poisonings, however, the average age was about four and two-thirds years which is well above the average age in the usual childhood poisoning accident. This finding suggests that some different factors are operating in plant poisoning.

In addition, it is noted from the reports that 16% of the poisoning accidents, involving 33% of the persons in this series, occurred in groups of two or more people. Group activity was largely among the somewhat older children, that is, four to 10 years old. Only an insignificant number of children had a history of pica or of repeated accidental poisoning.

From this survey, the ingestion of toxic plants seems to occur under the following circumstances:

1. Simple Curiosity.—This occurs most often in the age group of under four years and usually involves house plants or easily accessible yard plants. In this instance the plant need not be attractive or resemble food although it is often "striking" in appearance. Most of the accidents involving toadstools and elephant ear fall into this category. Prevention must be by removal of the hazard in advance or by constant observation and protection of the child by an adult.

2. Mimic Play.—This includes the use of parts of toxic plants as substitutes for "real foods" while mimicking domestic activities. This type of accident usually involves the four to 10 year old group and is one situation where several children are likely to be poisoned at one time.

3. Mistaken Identity.—The mistaken belief that nuts or fruits that resemble an edible substance or that taste good are themselves edible is responsible for many poisonings. This is a common cause among school age children and results in poisoning of adults too.

4. Practical Joke.—In 22 instances, 5% of the total, the person offering the fruit, and sometimes the person ingesting it, knew of the dangerous nature of the plant. Many of these accidents were severe enough to require hospitalization. These situations occurred largely in the six to 12 year old age group plus some teenagers—entirely among persons who should have known better.

Prevention

Prevention of plant poisoning depends primarily on observation and protection of the small child and gradual education of the older child to assume an adult-like responsibility for his eating habits by school age. Children should be taught not to put unknown plants and plant products into their mouths. The teaching and stressing of this general rule that no nuts, fruit and flowers be eaten without parental permission seem wiser than a warning against the specific plants. Children sometimes use knowledge of dangerous plants in an unwise manner. The fact that so many of the plant accidents occur in the school age child means that this aspect of the poison prevention program is being neglected in many of our children.

While occasionally the removal or transplanting of a particularly hazardous plant or one in a vulnerable location might be wise, there are many toxin-containing plants, native and imported, in our yards, gardens, and vacant lots. This form of poisoning represents such a small portion of the total poisoning problem that wholesale horticultural eradication efforts do not seem sensible or practical.

There are many toxic weeds, flowers and shrubs in Florida which are not represented in this study. It is probable that many cases were not diagnosed because no one knew of the ingestion or the physician did not recognize the plant as a significant factor in the illness. Some unexplained illnesses that physicians see may be on the basis of ingesting poisonous plants. Careful reports made to the Poison Control Centers can increase the deplorable lack of knowledge of poisoning from plants.

Conclusions

The majority of the poisonous plants ingested in Florida are plants well known as to their toxic nature and symptomatology.

The majority of plants concerned were found and ingested at or near the child's home.

The child's attention is drawn to the most attractive part of the plant—most often the fruiting part.

The average age of the children involved is considerably older than for other accidental poisoning, and the accidents are apt to involve more than a single child.

Since many of these children are older and playing together, increased attention to education about the general dangers of plant ingestion should be effective in decreasing the hazard.

Summary

Accidental poisoning from plant ingestion in the state of Florida during the past four years with an analysis of the symptomatology of the more commonly implicated plants is presented. The circumstances surrounding these accidents are explored and possible avenues for prevention are suggested.

References are available from the author upon request.

Sincere appreciation is expressed to Mrs. Julia F. Morton for her assistance in reviewing the manuscript and her kindness in the loan of the original color illustrations.

1661 Riverside Avenue.

Myocardial Necrosis

Diagnosis by Lactate Dehydrogenase Isoenzymes

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SARASOTA

Recent studies indicate that electrocardiographic diagnosis of myocardial infarction is subject to considerable error. Woods et al[1] demonstrated an overall diagnostic accuracy of 48% Further, electrocardiographic patterns indistinguishable from those found in myocardial infarction occur in cerebral vascular accidents[2] and subarachnoid hemorrhage,[3] such cases showing no evidence of heart disease at autopsy.

The discovery that many enzymes are heterogeneous and have components that catalyze the same reaction but show variation in their structures, giving these components distinctive physical and chemical characteristics, has broadened the field of enzyme diagnosis.[4] Lactate dehydrogenase (LDH) activity in man may be manifest in an array of five different isoenzymes.[6,7] These proteins are catalytically, immunologically and electrophoretically different. They also differ in thermal stability[5] and amino acid composition.[8,9]

Wroblewski et al[5] using the heat stability technique separated the five (electrophoretic) fractions of LDH into three groups, fraction 1 representing the slowest and fraction 5 the fastest moving component in the electrophoretic field. Fractions 2, 3 and 4 are separated as one component. Normal serum has been found to have a characteristic distribution of LDH isoenzyme activities by the heat stability method (table 1).

Table 1.—Percentage Composition of the Isoenzymes Obtained by Heat Stability Test of Serum of Normal Adults

Serum LDH Component	Range Is % of Total*
LDH_1	12-31
$LDH_{2,3,4}$	34-50
LDH_5	26-50

*Range includes 2X S.D. from mean value.

Myocardial necrosis results in an increase in the proportion of LDH fraction 5 in the serum, the isoenzyme found in heart muscle in the highest concentration. Fraction 1 elevation is present in necrosis of the liver and/or striated muscle. The component containing fractions 2, 3, and 4 reflects cell damage of multiple organs and appears to be nonspecific.[5]

Enzyme Assay[10,11]

Lactate dehydrogenase catalyzes the following reaction:

$$\text{Pyruvate} + NADH_2 \overset{LDH}{=} \text{Lactate} + NAD$$

Total activity of serum LDH is measured by the rate of decrease of optical density (O.D.) due to oxidation of reduced Nicotinamide-adenine dinucleotide ($NADH_2$) by pyruvate at pH 7.4 and temperature of 29 C. A unit of lactate dehydrogenase activity is: that quantity of enzyme which causes a decrease in O.D. of 0.001 per minute per

From the Department of Pathology and Laboratory Medicine, Sarasota Memorial Hospital, Sarasota, Fla.
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milliliter at pH 7.4 and temperature 29 C. and is measured at a wave length of 340 mu. The LDH isoenzymes are fractionated at a temperature of 57 C. and 65 C. Enzyme activity is determined by the same assay procedure as for total activity and is reported as a percentage of the total. Semiautomatic instrumentation was employed by using the Gilford modification of the Beckman DU spectrophotometer as described by Henry et al.[12] Between 30 and 40 assays can be done by a technologist per day.

Method

The following plan was adopted to evaluate the serum LDH isoenzyme assays as an indicator of myocardial necrosis. Single serum samples were obtained from patients on hospital admission or shortly thereafter. These assays were done without knowledge of the patient's clinical condition or diagnosis. All three components were determined by the heat stability technique. On completion of assays on 1,500 patients, clinical and electrocardiographic data were obtained and correlated. Pregnant females and patients under 18 years of age were excluded. This approach uses the isoenzyme assay as a screening test. For the purpose of this study serum LDH isoenzyme activities exceeding 31% for fraction 1, 50% for fraction 2, 3, and 4, and 50% for fraction 5 were considered to be abnormal activities.

Clinically, patients were divided into three categories:

Class A. Myocardial infarction established by history, physical and electrocardiographic findings.

Class B. Ischemic heart disease as indicated by history and symptoms associated with anoxic changes in the electrocardiogram.

Class C. All other cases including patients with and without heart disease.

Results

Table 2.—Number of Patients Showing Abnormal Elevation of Heat Stability Fractions

Normal	LDH_1	$LDH_{2,3,4}$	LDH_5	Total
1,232	100	8	160	1,500
82.1%	6.7%	0.5%	10.7%	100%

Table 3 shows the distribution of patients with elevation of LDH isoenzyme fraction 5.

Clinical Classification

Table 3.—Cases Showing Abnormal Elevation of LDH_5

A Myocardial Infarcts	B Ischemic Heart Disease	C Nonischemic Heart Disease or No Heart Disease	Total
124	27	9	160
77.5%	16.9%	5.6%	100%

When the per cent of LDH_5 is plotted against the total serum LDH, the distribution is illustrated in the following three figures, each circle representing a single determination on an individual patient.

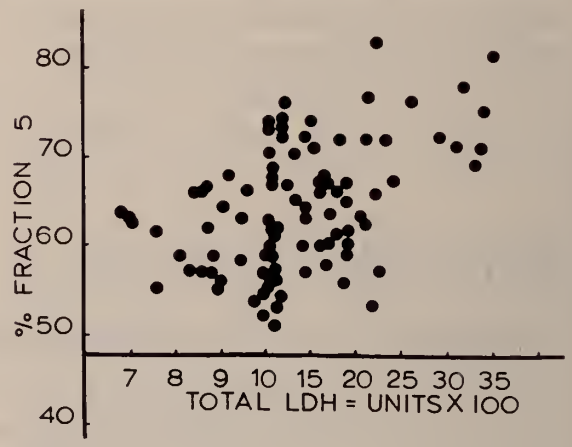

Fig. 1.—Myocardial infarction. Total LDH > 700 units.

In all patients having a total serum LDH of 700 units or above associated with an abnormal elevation of isoenzyme fraction 5, myocardial infarction was diagnosed both clinically and electrocardiographically.

Figure 1 is an extension of figures 2 and 3. Figure 2 represents cases of myocardial infarction having a total LDH below 700 units associated with an abnormal elevation of isoenzyme 5. In approximately half of these cases, samples were taken from patients during the first 24 hours following onset of symptoms. In the remaining patients except for four cases, the specimens were taken on or after the tenth day following the

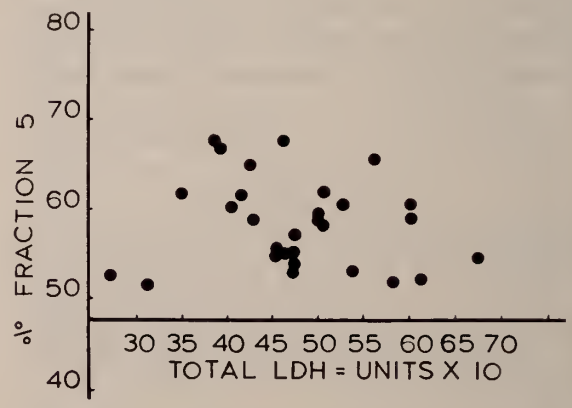

Fig. 2.—Myocardial infarction. Total LDH < 700 units.

initial onset of symptoms. In this group, 13 (44.8%) had an elevation of isoenzyme 5 in excess of 60%.

Using the LDH isoenzymes as a screening test, all three clinical classifications show a similar distribution when the total LDH units are below 700. In 27 patients with elevation of isoenzyme 5 the disease was classified as ischemic heart disease and presented a pattern as seen in figure 3. In this group, those showing 60% or greater increase in isoenzyme 5 clinically were thought to have myocardial infarcts but presented equivocal electrocardiographic findings. Patients whose condition was classified as nonischemic heart disease or no heart disease are represented by the open circles in figure 3 (class C).

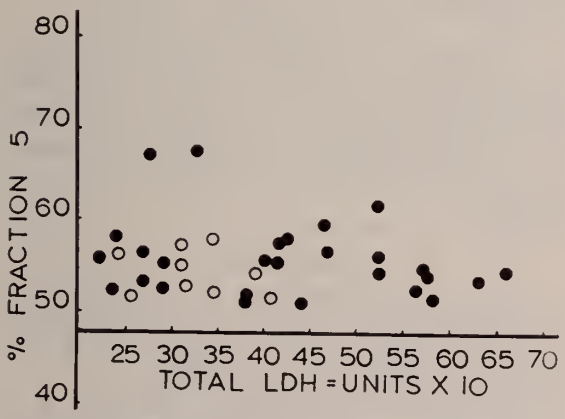

Fig. 3.—● = (Class B) Ischemic heart disease. O (Class C) see text.

In nine patients who presented elevation of fraction 5 the disease was not classified as infarcts or ischemic heart disease (class C, fig. 3). In two it was diagnosed as thyrotoxicosis, in two as vitamin B_{12} deficiency states and in one as sickle cell anemia in crisis. In the remaining patients the diagnosis was as follows:

1. Arteriosclerotic heart disease, cardiomegaly and right bundle branch block.
2. Arteriosclerotic heart disease with first degree heart block.
3. Arteriosclerotic heart disease with diabetes and abnormal electrocardiogram.
4. Functional chest pain associated with tachycardia.

Of the 124 patients with elevation of fraction 5, 26 died, 14 came to autopsy and all showed myocardial necrosis due to infarction.

Since the concurrent development of liver necrosis due to congestive failure in association with myocardial infarction may tend to obscure fraction 5 elevation, the condition of patients showing elevation of fraction 1 was analyzed and classified as indicated in table 4.

In eight cases elevation of fraction 5 was obscured because of severe chronic passive congestion in patients with infarcts. This factor must be considered in interpretation of LDH isoenzyme patterns in myocardial necrosis.

Comment

Necrosis of cells releases intracellular LDH which finds access to the extracellular fluids resulting in an increase in serum lactic dehydrogenase. Experimental observations indicate that serum LDH activity alternations associated with tissue necrosis are influenced by: 1. The amount of enzyme present in the necrotic tissue. 2. The extent of the necrosis (tissue mass). 3. The rapidity with which necrosis occurs. 4. The rate of loss of enzyme from the tissue. 5. The accessibility of the lost enzyme to the circulation. 6. The normal range of the patient's serum LDH isoenzyme activity. Experimentally rapid proliferating cells show increase in LDH in their surrounding media. This suggests that actual necrosis of the cell is not always essential. Elution of enzyme from cells may occur with change in cell membrane permeability without ultimate death of the cell.[13]

Using the LDH isoenzyme pattern as a screening test is subject to the variables mentioned, but the time relationship beginning with the onset of myocardial necrosis and the pattern of appearance of the total LDH and isoenzymes in the serum during the course of the pathological process is of paramount importance.

Figure 4 shows the changes in the serum activity of total LDH and fraction 5 in a patient with acute myocardial infarction. The actual acute attack occurred after admission for ischemic symptoms. The enzyme assay on the second day is approximately 12 hours after the onset of acute symptoms.

Table 4.—Elevation of LDH Fraction 1

Number of Cases	Infarct Plus CPC* of Liver	Myocardial Failure Plus CPC of Liver	Hepatic Necrosis of Noncardiac Origin
100	8 (8%)	12 (12%)	80 (80%)

*CPC (chronic passive congestion) clinical classification.

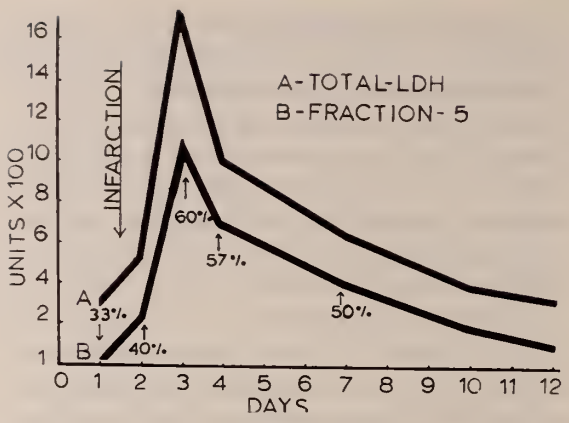

Fig. 4. — Myocardial infarction.

Until recently no direct objective proof that myocardial necrosis occurs during severe myocardial ischemia other than the indirect evidence of myocardial fibrosis at autopsy was available. Sommers et al,[14] however, demonstrated in dogs both reversible and irreversible changes of the myocardial cells by electron microscope following transitory ischemia.

Conclusion

The presence of elevation of LDH fraction 5 with a total LDH of less than 700 units appears to be supportive evidence of minimal myocardial necrosis.

A single serum LDH of 700 units or greater with an elevation of LDH fraction 5 in excess of 50% appears to be strong presumptive evidence of acute transmural myocardial infarction.

An elevation of serum LDH fraction 5 exceeding 60% regardless of the level of total serum LDH is presumptive evidence of myocardial infarction.

Certain diseases such as thyrotoxicosis and sickle cell anemia[15] in crisis which frequently show myocardial necrosis at autopsy also presented evidence of necrosis by this technique.

Vitamin B_{12} deficiency states [16, 17] and certain hemolytic anemias [18] may give elevations of serum LDH total and fraction 5, but may be distinguished from myocardial necrosis by serial enzyme assays.

Cardiac shock [19] may temporarily obscure enzymatic evidence of myocardial necrosis due to transient elevation of total LDH, secondary to anoxia of other tissues. The isoenzyme pattern may be normal, changing to a fraction 5 pattern as the patient recovers from shock.

Myocardial necrosis patterns of serum LDH may be obscured by the development of severe chronic passive congestion of the liver with central necrosis of hepatic cells. This results in a significant rise in serum LDH fraction 1.

A number of authors have reported investigations of the heat stability technique using only serum LDH totals and percentage of fraction 5.[20, 21] This ignores the patient's normal enzyme pattern resulting, in our opinion, in a less sensitive test.

Summary

Fifteen hundred patients were screened by assaying total serum LDH and isoenzyme patterns by the heat stability technique.

Data are presented suggesting this method to be a sensitive and relatively specific method of diagnosis of myocardial necrosis. Problems relating to interpretation are presented.

The heat stability method for assay of LDH isoenzyme components lends itself to semiautomated procedures, making it available as a routine laboratory test.

References are available from the authors upon request.

1950 Arlington Street.

DOCTOR, WOULD YOU LIKE TO BE AMONG A SELECT 25?

We're referring, of course, to the 25 spaces reserved for scientific exhibits during the 1966 Annual Meeting of the Florida Medical Association being held May 12-15 at the Diplomat Hotel, Hollywood.

Applications are now being accepted for potential exhibits by Florida medical men and women. An outstanding collection of scientific visual presentations is rapidly being compiled. Spaces are 10 feet wide and eight feet deep, and a few yet remain.

If you want to be among the select 25, send in a brief description of your planned exhibit to Richard G. Connar, M.D., Chairman, Scientific Work Committee, P. O. Box 2411, Jacksonville 32203. Don't delay!

Cataract Extraction With Corneal Section

CURTIS D. BENTON JR., M.D.
FORT LAUDERDALE

Since impressions can be misleading, it is important in medicine to analyze results continually. This observation is very true of cataract surgery. The present review of 250 consecutive cataract extractions with corneal section shattered my confidence in the routine use of capsule forceps, but strengthened my conviction that eyes fare better with minimal manipulation.

The development of my present technique in cataract surgery was reported in 1958.[1] It consists of:

1. Retrobulbar injection of 1.5 cc. of 1% lidocaine (Xylocaine), with hyaluronidase added, plus lid akinesia.
2. Pressure on the globe to soften the vitreous.
3. A scratch incision 1 mm. down from the 12 o'clock limbus, held open with a suture of 6-0 mild chromic catgut in the lips.
4. Completion of scratch with No. 15 Bard-Parker knife blade followed by enlargement with corneal scissors.
5. Two peripheral iridotomies.
6. Removal of lens with capsule forceps or erysiphake and counter pressure.
7. Closure of wound by tying preplaced suture and inserting four or more of the same, evenly spaced.
8. Deepening of the anterior chamber with air or saline, if needed.

Results

In just over half of the patients thus operated on the course progressed to a successful conclusion with no complication of any sort, either preoperatively, during the operation, early postoperatively or later, including nonassociated ocular disease or defects. The figures are shown in table 1.

Table 1. — Cases with No Complications (250 Operations)

20/20	95	38.0%
20/25	30	12.0%
20/30	11	4.4%
	136	54.4%

Even though ocular defects are known before operation, and a variety of undesirable things happen during and after the operation, most eyes recover good vision after cataract extraction. The inclusive results of this series are seen in table 2.

Table 2. — Final Visual Results (250 Operations)

20/30 or better	207	82.8%
20/40 to 20/100	31	12.4%
20/200 or worse	12	4.8%
	250	100.0%

In analyzing the complications, I found that accidents happened during the operation at the rate of one in 11 operations. Vitreous was lost five times and the lens capsule was ruptured in 18 patients. This latter complication may be reduced in the future by use of the suction erysiphake or cryosurgical tip more frequently than the capsule forceps, as has been my custom. Even with these accidents, most patients recover nicely, as seen in table 3.

Table 3. — Operative Complications Effect on Final Vision

20/20	10
20/25	4
20/30	1
20/40 to 20/100	7
20/200 or less	1
	23 (9.2%)

After the cataract extraction, all sorts of things can happen.

Table 4. — Nature of All Postoperative Complications

Vitreous	25
Iris	25
Flat chamber	8
Corneal dystrophy	3
Hyphema	2
Endophthalmitis	1
Retinal detachment	2

One fourth of my patients (67) experienced some sort of complication. I have learned to respect the caprices of the vitreous humor. It accounted for 25 (37%) of the troubles. Some persistent haziness was detectable in 11 cases. The vitreous sooner or later broke into the anterior chamber in 14 cases, and in six of these it adhered to the incisional wound. Vitreous traction syndrome developed in two patients, dropping their vision from 20/30 to 20/200 because of clouding and macular edema. Surgical separation of the adhesions restored vision to 20/40 in one patient and 20/50 in the other.

The iris was responsible for the same number of complications as the vitreous, 25 (37%). Iritis of clinical severity occurred in five. Some part of the iris adhered to the corneal wound in 10 patients and in 10 others iris prolapse developed.

Although half of the prolapses (5) were patient-induced, half were not. To reduce the incidence of this most undesirable complication, I now use a stronger eye shield and leave the sutures in place a full three weeks. Only seven of the wound ruptures were severe enough to require reoperation and luckily many of these patients obtained good vision.

Flat anterior chamber is not a serious problem with corneal sections. I have never had a delayed chamber, because one is always formed at operation with aqueous, saline or air. Subsequent loss of the anterior chamber with choroidal detachment occurred in eight patients. In seven it refilled spontaneously and in one required surgical intervention. In no case did it impair the final visual outcome.

Other complications were rare. Corneal dystrophy occurred in three patients, all with rather bad results. Hyphema was no problem with this technique, occurring in only two patients. Endophthalmitis, resulting in blindness, happened one time. Late retinal detachments, with loss of sight, occurred in two patients. The effects of the postoperative complications, early and late, on final visual outcome are illustrated in tables 5 and 6.

Table 5. — Early Postoperative Complications

Effect on Final Vision	
20/20	11
20/25	6
20/30	4
20/40 to 20/100	6
20/200 or less	4
	31 (12.4%)

Table 6. — Late Postoperative Complications

Effect on Final Vision	
20/20	17
20/25	7
20/30	3
20/40 to 20/100	7
20/200 or less	2
	36 (14.4%)

In spite of otherwise successful operations, some patients, 24 in this series, had ocular diseases, either known before or discovered after the operation, that impaired final vision. Macular degeneration and glaucoma were the most common. The incidence of unrelated ocular diseases is shown in table 7.

Table 7. — Other Ocular Diseases Not Related to Cataract Surgery

Macular degeneration	9
Glaucoma (preoperative)	6
Diabetic retinopathy	3
Corneal opacity	2
Optic atrophy	2
Retinal detachment	2
	24 (9.6%)

Their effect on vision can be seen in table 8. There were three very disheartening patients in this group of 24. Two had undetected retinal detachments before operation. The operation was without benefit. Occlusion of the central retinal artery just before or just after operation left one patient with a blind eye. The other eye had been successfully operated on.

Table 8. — Other Ocular Diseases Not Related to Cataract Surgery

Effect on Final Vision	
20/20	0
20/25	2
20/30	6
20/40 to 20/100	11
20/200 or less	5
	24 (9.6%)

Comparison of Methods

It is rather difficult to compare cataract extraction through a corneal section with that under a flap. The chief advantage of the flap is said to be a stronger wound, but the incidence of wound rupture with iris prolapse is equal in all the statistics I could find. The frequency of loss of the anterior chamber in my series (3.2%) is no greater than in cases with flaps. Hyphema is decidedly less with the corneal section. There does seem to be less postoperative pain in eyes with flaps.

The most important reason, in my mind, for preferring the corneal section is the reduced surgical trauma to the eye. The operating time is only eight to 12 minutes, the wound is minimal size and involves only one structure, there is no blood, and the tissues undergo very little manipulation. The corneal section allows for easy placement of additional sutures to a total of six or seven should the wound seem insecure. As time goes on, I become more critical of wound closure and the incidence of wound rupture in the last half of this present series is about nil. A summary comparison of corneal sections and flap operations in cataract surgery is presented in table 9.

Table 9. — Comparison of Results in Corneal Section and Flap Operations

	Flap	Corneal Section
Vitreous loss	3.7%	2.0%
Hyphema	3.7%	0.8%
Flat chamber	6.9%	3.2%
Iritis	5.4%	2.0%
Wound rupture	4.0%	4.0%
Retinal detachment	1.0%	0.8%
Corneal dystrophy	1.4%	1.3%

1. Benton, C. D., Jr.: The Development of a Successful Technic for Cataract Extraction, South. M. J. 51:1562-1566 (Dec.) 1958.

1800 East Las Olas Boulevard.

Alcoholism and the Family Physician

RONALD J. CATANZARO, M.D.
AVON PARK

The topic that I shall discuss is best summarized in the form of a question. How can we, the physicians of Florida, best do our part to see that every alcoholic in Florida has adequate medical care available to him or her?

To this you say, "Why should we waste our time seeing that all those drunks are treated?" My reply is simply this: "The American Medical Association, in 1957, officially recognized that alcoholism is a medical illness and that the alcoholic is a sick person. As a person with a recognized medical illness, he is entitled to adequate medical care as are the rest of your patients."

When all physicians fully accept the concept of the alcoholic as a person suffering from a chronic illness which has remissions and exacerbations much like other chronic illnesses such as asthma, arthritis and peptic ulcer, then I believe all physicians will find more success and more satisfaction in working with alcoholics.

Many physicians become discouraged treating the alcoholic because, just when he says "Doc, I've been sober three weeks now. I've decided I'm never going to drink again, I don't even like the taste of that stuff anymore," he leaves the doctor's office, buys a bottle and goes on a three day bender. The physician says to himself at this point, "Sure I know the American Medical Association officially recognized alcoholism as a chronic disease. But let's be truthful; a large part of this so-called disease boils down to a basic defect in character, in morals, in will power." Such condescending eponyms as jellyfish, spineless, inadequate, and just an old drunk, are indicative of the low esteem in which the alcoholic is eventually regarded by his physician.

At this point one should ask: "How about the asthmatic who has a severe attack of asthma whenever a great emotional situation arises? Do you stop treating him because he's being uncooperative and not getting well like a good patient should? Doesn't much of his real trouble boil down to a character weakness, an inability to deal with life in a 'normal way' whenever the going gets tough? And how about the ulcer patient who gets a pain in his stomach whenever his boss yells at him? Shouldn't he be dismissed as an uncooperative patient when his ulcer pain keeps recurring in spite of intense treatment?"

For editorial comment see page 899

Many doctors say, also, that you can't trust an alcoholic, that they're chronic liars. Have you ever painstakingly tried to make a fat patient with hypertension reduce, telling him that if he loses 40 pounds he'll live 10 years longer? And after this 300 pound hunk of manhood is on a 1,000 calorie diet for one month you succeed only in having him gain five more pounds? He looks you in the eye and swears he ate only what you told him, ate like the proverbial bird (forgetting a vulture is a bird, too). But you know that physiologically what he says is an absolute impossibility. If you want to treat a group of patients who are liars, treat fat folks. Aren't they dishonest, morally weak, and weak-willed? Shouldn't you toss them out of the office feeling absolved from any guilt of contributing to their premature death? They didn't follow your orders; so they deserve what they get. They're bad patients. This is the plight that the alcoholic so often finds himself in today. But effective treatment methods have evolved and are in use widely today.

Guidelines for Treating the Alcoholic

There are three basic rules which I find very useful in treating alcoholics. I believe any physician would find them useful when faced with an alcoholic patient.

FIRST RULE:

Make the correct diagnosis of alcoholism. One may say, "That's simple; I can tell a drunk when I see one." Most often though, the alcoholic does not enter the physician's office reeking of alcohol and complaining of drinking too much. Quite often his chief complaint centers about a complication of his alcoholism. The most common chief complaints which should alert the physician to the possibility of a coexisting alcoholic problem are complaints which fall into the following five categories:

Medical Director, Florida Alcoholic Rehabilitation Program.
Paper presented at the 15th Annual Scientific Assembly, Florida Academy of General Practice, Fort Lauderdale, Nov. 1, 1964, as part of an AMA Symposium on Alcoholism.

1. Gastrointestinal symptoms, such as peptic ulcer, gastritis, hematemesis, chronic indigestion, pancreatitis, cirrhosis and hemorrhoids.

2. Orthopedic symptoms, such as multiple fractures of mysterious origin, commonly of the ribs, arms and skull. These may be the result of one of the occupational hazards of drinking, falling from a high bar stool.

3. Neurologic symptoms often vague in character, such as blackout spells, amnesia, peripheral neuritis, chronic brain syndrome, and Korsakoff's and Wernicke's syndromes.

4. Psychiatric symptoms, such as nervousness, depression, loss of sexual drive, promiscuity, homosexuality, suicide attempt and insomnia.

5. Social maladjustment symptoms, such as increased marital discord, failure to advance on the job, and failure to get along with associates.

Both the patient and his spouse should be questioned about a possible drinking problem when the patient presents with one of these symptoms. It is often unwise to investigate extensively the possibility of a drinking problem on the patient's first visit. Often it is more effective to wait until the second or third visit, after some tangible rapport has been established, before questioning the patient and his spouse in detail concerning a drinking problem. And don't overlook the possibility of both marriage partners having an alcoholic problem.

SECOND RULE:

Insist on 100% abstinence from alcohol. It is a mistake for the physician to focus initially on finding the "cause" for the patient's drinking with the idea in mind that once the cause is uncovered and understood, the drinking will stop automatically.

It is safe to assume that the alcoholic has not only the initial "problem" which caused his alcoholism, be it sociologic, psychologic, or of other origin, but also has an additional problem, that of addiction to alcohol. To treat the alcoholic one must focus on the problems in the reverse order in which they developed. Initially one should focus one's efforts on achieving 100% abstinence from the use of alcohol, and then gradually shift emphasis to the problems which appear to underlie the alcoholism. The more successful the patient is at completely abstaining from the use of alcohol, the easier it will be for the patient and the physician to understand and treat the problem areas which may have given rise to the alcoholic problem initially. It is important for the physician to be prepared to accept the fact that the alcoholic rarely achieves continuing sobriety the first time his physician recommends it. Each time the patient resumes drinking the physician must explore with him the factors which led up to resumption of drinking and with this knowledge must help him work out alternative realistic solutions to "solving his problems" instead of resuming drinking to solve them.

Useful community resources in helping the physician to treat his alcoholic patient successfully are the Florida Alcoholic Rehabilitation Program, Alcoholics Anonymous, the local Council on Alcoholism and local clergymen who have shown a definite interest in helping alcoholics successfully. Also many physicians find that starting the patient on disulfiram (Antabuse) is helpful, but it is by no means a cure-all.

THIRD RULE:

Alcoholics are often filled with feelings of being a hopeless case. If they detect similar feelings in their physician they will often drop out of treatment. It is extremely important, therefore, that the physician maintain an optimistic and constructive attitude. The idea of refusing to treat an alcoholic because doctors only treat sick people and not drunks is a cruel and unrealistic approach. Treatment of the alcoholic can be a very rewarding endeavor for the physician and the patient.

P. O. Box 1147.

Changing Concepts in the Treatment of Mental Illness

HERMAN SELINSKY, M.D.
MIAMI

It is sometimes said that we are now at the beginning of the Third Psychiatric Revolution in the treatment of the mentally ill. The First Revolution was kindled by the monumental courage which Johann Weyer displayed in the middle of the sixteenth century when he dared to attack the Malleus Maleficarum (Witches' Hammer). This infamous pronouncement established the dogma that the mentally ill were possessed by witches and demons. This dogma prevailed as a basis for dealing with the mentally ill among secular and ecclesiastical authorities. They dealt with these unfortunate victims by subjecting them to be burned at the stake, or employing other violent and brutal methods. Weyer's challenge, published in 1592 as "De Praestigiis Daemonium," must forever be regarded as the Magna Charta for the mentally ill.[1]

In England, William Tuke (not a physician), greatly disturbed by the prevalent manner of dealing with the mentally ill, labored to establish the York Retreat, an effort which he began at the age of 60. Prior to this time, Bedlam, which was originally founded in London as the Bethlehem Hospital in 1247,[2] had over the succeeding centuries become a prison-like custodian, a forbidding warehouse of confined "lunatics who were unsafe to walk the streets." It became a practice for those who sought some esoteric sport, to go viewing these "lunatics" and trading insults with some of the more vocal inmates, from a safe viewing spot, having paid the keeper a fee for such an opportunity. Hogarth has provided us with a magnificent description in his engravings. And "bedlam" has become incorporated into the English language to signify the disorder and confusion which those inmates manifested. The York Retreat, established in 1792, became a model for a more humanitarian hospital-like asylum and Tuke's medical progeny carried on the superb dedication of this noble pioneer.

But it was Philippe Pinel who, during the chaotic upheaval of the French Revolution in the latter part of the eighteenth century, dared to risk his neck literally by striking off the chains and fetters from the "alienated ones" (Les Alienées) at Bicêtre.[3] His revolutionary act has become a symbol to inspire the forces who must face the hostility of those who consider themselves guardians of rigidly traditional society. Pinel's name remains for all time an illuminating passage in the spectacular and brilliant history of the Salpêtrière.

The Father of American Psychiatry

In this country, in the latter part of the eighteenth century, Dr. Benjamin Rush, famous in American history as a signer of the Declaration of Independence, promulgated his ideas and opinions in a treatise published in 1812, "Medical Inquiries and Observations upon the Diseases of the Mind," dealing largely with his experiences at the Pennsylvania Hospital.[4] In addition to the work of Dr. Rush, there is the pioneer work of Dorothea Lynde Dix, a Civil War heroine, attempting to establish more rational and humane treatment of those who suffered from mental disturbances.[5]

And in passing, one should not omit the historical contribution made by Clifford Beers 40 years ago in "A Mind That Found Itself,"[6] which aroused the public's indignation about the apathy and rejection accorded to persons afflicted with mental illness. His work pioneered the development of the "Mental Hygiene" Movement, now known as the "Mental Health" Movement, which provided powerful impetus for reforms.

The Second Revolution

The Second Revolution in psychiatric concepts and practice began with the startling revelations and monumental insights initially provided by Freud a decade before the turn of this, the twentieth century. This work illuminated the labyrinthine passages of mental and emotional operations. It gave to the emotionally disturbed person and his physician access to a dynamic understanding of his feelings, thoughts and behavior, which

Clinical Professor of Psychiatry, University of Miami School of Medicine.

hitherto had been incomprehensible. One needs only to glance through the textbooks on "Nervous and Mental Diseases" of only 50 years ago to grasp the significance of the profound change in attitude, understanding and therapeutic methods. Some of this seems almost medieval today. This author, who began his career in this field 40 years ago, can personally testify to this change.

Prior to Freud's contributions, mental illness was generally considered to be a manifestation of organic brain disease. Antisocial behavior whether in child or adult was laid at the doorstep of deformities of the cranium and the intracranial contents. Phrenology, the "science" of being able to explain human behavior, especially behavioral disorder on the basis of bumps on the skull, had a vogue. Lombroso advanced a theory of criminal behavior which remained popular a long time, based upon characteristics of the physiognomy and misshapen cranial patterns. Today we look back upon this with some amusement and incredulity.

The application of this new knowledge concerning the human mind and its disturbances made possible the development and growth of individual psychotherapy applied to both children's problems and adult problems, group therapy and more recently, family therapy.

Perhaps the most important aspect of all these developments is that we have come face to face with the forces operating in human nature and human society which tend to make us ill. Not only have psychiatrists and psychologists been equipped with this knowledge, but also the sociologist, the anthropologist, the artist, the lawyer, the teacher and others.[7]

The Third Revolution

The Third Psychiatric Revolution has been marked by the use of physical and chemical therapeutic agents. Insulin shock, developed by Sakel in Austria in the 1920s, is now rarely used, having reached its zenith in the 1930s.[8] Electroshock, which was first employed clinically by Cerletti, is still widely utilized, but the advent of the chemotherapeutic agents in the past score of years has reduced its necessity. These chemotherapeutic agents, roughly, the tranquilizers and energizers, have brought about great changes in methods of treating the mentally ill. There has been a consistent reduction in the period of continued hospitalization, so that the large state hospitals—where the chronically ill (mental) patients were packed together in the dreary warehouses of forgotten men and women—now are becoming less important. And the need for drastic brain-damaging procedures, such as extensive repeated series of electroshock treatments and prefrontal lobotomy, is diminishing steadily.

Community Mental Health

More hopeful incentive has been provided by all these factors to help advance the battle line in the treatment of the mentally ill—an increase in the establishment of first aid stations in the community. These consist of the psychiatric clinics for adults and children, the psychiatric wards of the general hospital; the halfway houses to rehabilitate those who have required hospitalization and are being returned to the home and job; the residential treatment center for adolescents who are emotionally disturbed; the counseling service in grade school, high school and college; the "walk-in" clinic open 24 hours a day for the agitated, depressed or anxious person who imminently fears being so overwhelmed by emotional storms that he may not be able to control himself. In addition, Day Care and Night Care programs are expanding.

With the impetus given to the program for the mentally ill and mentally retarded by the late President Kennedy, there has now been evolved the concept of the Community Mental Health Center.[9] This facility acts as an umbrella under which are incorporated, integrated and coordinated the mental health services of the community. Obviously such coordination in planning and intelligent deployment of trained personnel is highly advantageous. It makes possible the utilization of financial outlay for those installations which are strategically placed and avoids reduplication. It enables the task force which is engaged in such coordination to rehabilitate obsolescent buildings. In some states, for example, New York State, some of the old large state hospitals are now being converted into rehabilitation centers—halfway houses where those who are being discharged from acute treatment can be sent to continue in group therapy, physical reconditioning and occupational therapy before being sent back into home and job. Furthermore such a coordinated planning center enables the community to maintain a program of continuing education for the training of necessary personnel in all fields relating to mental health.

We must face the fact that the conditions which now exist in the world are tending to tear

down the fabric of constituted society as we knew it in the past. Drastic changes are being made and further drastic changes are being contemplated and will inevitably occur. In this process of profound alteration and reconstruction of our society, the emotional forces in human beings are undergoing considerable stress. It is therefore highly likely that we will have to face an ever growing need for adequate personnel and facilities to care for the mentally ill, be the illness mild or severe.

Preventive Psychiatry

Our experience is teaching us to place increasing emphasis on preventive measures in community psychiatry. This means providing more extensive facilities for detecting and treating children of preschool age and school age who manifest evidence of maladjustment. The latter may be due to disturbed conditions at home, such as quarreling parents, intense sibling rivalry, a death in the family; or to the fact that the youngster has been moved around a great deal from neighborhood to neighborhood and is thus deprived of socializing experiences, especially chumship; or it may signify learning difficulties. Learning difficulties are not only a reflection of retardation in intellectual functioning, but they may also signify boredom of the student who is endowed with a quick mind. The most frequent cause of learning difficulties, however, is emotional disturbances in the youngster, for example, "drop-outs." These may be provoked by a number of factors operating in his life situation, namely, constant friction in the home; lack of adequate social experience for the child in his environment; separation from one or both parents frequently, for example, business trips; the absence of one parent for an extended period of time (death or divorce); the only child situation; unusually intense sibling rivalry, and so on. These factors tend to cause the youngster to resort to daydreaming to an excessive degree.

Conclusion

With the increasing conviction that comes with added experience, it is quite likely that our communities will turn more and more to the guidance provided by the Community Mental Health Center with emphasis on prevention. At the time of this writing, it has been announced that a massive program is to be launched by the federal government to screen out children at nursery school age who present indications of being emotionally disturbed. It is this awareness of "a penny of prevention is worth more than a dollar of cure" which is to be strongly emphasized, measured in human suffering and disability. Life has become increasingly complex; so machinery for coping with its economic, political and social problems has to be evolved to meet the urgent, sometimes desperate need for help. We are coming to the realization that the guiding dictum will be "Mens Sana *et* Corpora Sana."

References are available from the author upon request.

1300 Venetian Way.

Paraurethral Gland Adenocarcinoma

QUENTIN C. DeHAAN, M.D.
BARTOW

Primary malignant tumors of the female urethra are of infrequent occurrence. McCrea[7] in an extensive review of literature in 1952 found 546 authenticated cases. In these cases 504 of the neoplasms were carcinomas, 23 sarcomas and 19 melanomas. Of the 504 carcinomas, only 48 were adenocarcinomas originating in the paraurethral glands. McCrea concluded this malignant disease is of more frequent occurrence in the female than in the male, and that treatment over the years has been unsatisfactory.

Graves and Guiss[5] in 1941 at the Pondville Hospital, which is devoted entirely to the care of neoplastic disease, reviewed all of the cases of urethral carcinomas seen during the preceding 14 years. There had been but 10 cases of cancer of the female urethra in that period. In two of these cases the tumor originated in the paraurethral gland.

In 1955, Fagan and Hertig[4] reported eight cases of carcinoma of the female urethra at the Free Hospital for Women from 1935 through 1954. All were of squamous or transitional cell type.

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The most recent report is that by Brack and Dickson,[2] who discussed 14 additional cases. Eight were of the vulvourethral type and six of the urethral type. Eleven of the lesions were diagnosed microscopically as epidermoid carcinoma, one as urethral caruncle with malignant degeneration, one as carcinoma in a polyp, and one as lymphosarcoma.

Because of its rarity, the present case of an adenocarcinoma originating in the paraurethral glands is reported.

Report of Case

A 42 year old Negro woman was seen in the Polk County Hospital Out Patient Department on July 23, 1963, with complaint of pain in the rectum. The patient had been seen by a physician in another city with complaint of back pain for which she had been given treatment referable to a urinary tract infection. She also had previously complained of burning and pain on urination.

She gave a past history of having had a hemorrhoidectomy on Sept. 21, 1958, a D and C on Oct. 19, 1960, for abnormal bleeding, and an abdominal hysterectomy with bilateral salpingo-oophorectomy on Nov. 11, 1960, for leiomyomata uteri and pelvic inflammatory disease.

Examination of the patient in the Clinic revealed her to be in general good health and in no acute distress. The general physical examination was unremarkable. A midline scar extended from the umbilicus to the symphysis pubis. Pelvic examination revealed some blood in the posterior vaginal vault. The urethral orifice appeared dilated and a small amount of blood was oozing from this area. A suburethral mass could be felt and was estimated to be 3 to 4 cm. in diameter and hard to palpation. Compression of the mass by the index finger produced additional discharge through the urethral meatus. A presumptive diagnosis of urethral diverticulum was made at this time.

The patient was admitted to the hospital the following day for work-up. Routine studies including a complete blood count, urinalysis, VDRL and chest x-ray were normal. Cystoscopy and panendoscopy were performed on July 26, 1963. An orifice was present along the posterior urethral wall through which blood and pus could be expressed from an apparent sac. Urethral dilatation and urinary antisepsis were suggested for the present time. If the problem failed to respond, surgery was suggested to remove the presumptive diverticulum. The patient was discharged from the hospital on July 27 to be followed in the Clinic.

On September 23, the patient was readmitted to the hospital for excision of what was thought to be a suburethral diverticulum. The next day, following general anesthesia a pelvic examination revealed a suburethral mass approximately 2 cm. in width and extending about 4 cm. in depth beginning about 2 cm. from the urethral meatus. A vertical incision was made over the mass through the vaginal mucosa down through a considerable amount of indurated tissue. With some difficulty, the overlying vaginal mucosa was dissected away from the indurated tissue, portions of which were excised. Also with some difficulty at dissection, the mass was entered on the left lateral urethral wall. No definite cystic wall or cavity could be defined. An area of induration and what appeared to be necrotic-like material was present. This was seen then to open into the urethra which was probed and a small opening was apparent measuring approximately 4 to 5 mm. in diameter. The paraurethral tissue was reapproximated with interrupted sutures of 2-0 Chromic occluding the defect into the urethra. The paravaginal fascia was reapproximated with interrupted sutures of 2-0 Chromic. The vaginal mucosa was closed over this with 2-0 Chromic. A Foley catheter was placed in the bladder at the end of the procedure and drainage was clear.

The pathological report of the pieces of indurated tissue removed at the time of operation revealed an infiltrating Grade II adenocarcinoma. The appearance of the neoplasm was consistent with a primary site in the gastrointestinal tract; however, it was thought that the tumor originated in the paraurethral glands.

The patient was referred to the University of Florida Hospital on November 17, where she was treated with radium needle implantation around the tumor area with a tumor dose of 5,500 r. Subsequently the tumor was reduced in size by approximately 50%. Follow-up visits in the Out Patient Genitourinary Clinic were made monthly during 1964. Post radiation scarring was noted. Each visit necessitated urethral dilatation by the urologist and periodic treatment with sulfa drugs.

As of this date, she is continuing to do well. There is no evidence of recurrence of tumor and no evidence of metastatic disease.

Discussion

Adenocarcinoma of the female urethra makes up one of the smaller groups of malignant tumors. Most of the carcinomas have been squamous carcinomas. A still rarer type of mucoid carcinoma has been reported by Menville and Counseller.[8]

According to Walker and Huffman,[9] the adenocarcinomas have their site of origin in the paraurethral ducts and glands.

What seems to be the important factor in many cases of urethral carcinoma is the method of treatment. Everett[3] cited the two small series of cases of Fagan and Hertig[4] and of Brack and Dickson[2] in which the best results were obtained with the radiation. He therefore recommended this as the treatment of choice for this type of tumor.

Auer[1] stated that he did not regard deep x-ray therapy as an effective agent locally or for the glandular metastases. He believed that the absence of gross involvement and even the small size of the tumor should not encourage conservatism in regard to the groin.

The British[6] recommended that if the growth is confined to the lower urethra, it can be excised together with the anterior part of the vulva and the superficial and deep inguinal glands from both sides. Alternatively, or as an adjunct to surgery, radium needles can be implanted around the urethra so as to irradiate the growth with the calculated dose. The regional lymph nodes can then be excised on each side. If the growth is more extensive when first seen, reliance must be placed upon radial therapy alone or very radical surgery must be undertaken.

Summary

A case of adenocarcinoma of the urethra originating in the paraurethral glands is reported. Review of the literature shows the rarity of the lesion as only 50 cases have been reported.

References are available from the author upon request.

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Nongestational Choriocarcinoma of the Ovary

Report of a Case

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Primary choriocarcinoma of the ovary may be gestational or nongestational. The latter type usually arises from a teratoma or from an embryonal rest. It has been estimated that the chance of its arising in the ovary primarily is one in 392,000,000. Most choriocarcinomas arise within the uterine cavity where they occur once in about every 40,000 pregnancies.

Report of Case

A seven year old white girl was first seen on Aug. 20, 1963, because of what the mother described as "growing up too fast." The child's development was evidently normal until approximately a month prior to admission at which time breast development was noted by the mother, pubic hair began to appear, and the child started to menstruate. There had been daily flow of blood requiring two pads daily for the previous two weeks. The girl had always been active according to the mother and was currently in school. The child complained of some discomfort in the lower abdomen, but was otherwise asymptomatic.

Examination at this time revealed a normal-appearing child of seven years whose height was 51¾ inches and weight 64 pounds. The breasts were symmetrically enlarged to a size expected in a child entering puberty. A small discrete mass 0.5 cm. in diameter was noted in the right lower quadrant of the right breast. No axillary hair was present. Abdominal examination revealed a mass arising out of the pelvis almost to the umbilicus, symmetrical, somewhat fixed and nontender. Rectal examination revealed only that the mass filled the cul-de-sac. A moderate amount of hair was present over the mons pubis and external genitalia. The labia majora were enlarged as was the clitoris. The child was actively menstruating.

The patient was admitted to the hospital for further evaluation and definitive treatment. The impression at the time of admission was that of a hormone-producing ovarian tumor probably of the granulosa cell type. Routine blood and urine studies were unremarkable. A gram stain of a smear taken from the vagina revealed gram-positive rods and occasional pus cells. X-ray of the chest revealed normal heart and lungs. A flat plate of the abdomen showed a hazy increased density in the pelvis. A 7 mm. calcium density was seen in the left upper quadrant which was thought to lie within the spleen. The patient was taken to the operating room on August 23 for exploratory celiotomy. An excisional breast biopsy was also planned.

Upon opening the abdomen there was an apparent large, bluish, glistening tumor. It measured approximately 12 cm. in diameter. The mass was delivered up through the wound without difficulty and was found to originate in the right ovary. The uterus was small, anterior in position, freely movable, and free of disease. The left tube and ovary were closely examined and noted to be normal. A right salpingo-oophorectomy with cornual resection of the tube was carried out without difficulty. Following closure of the abdomen, the right breast was prepared and draped and an excisional biopsy was made of the pea-sized nodule in the right lower quadrant. The patient suffered no untoward reaction throughout the procedure and was returned to the recovery room in good condition. She had a mildly febrile course postoperatively and was discharged on the twelfth postoperative day.

Microscopic description of the tumor was that of an encapsulated partially cystic and mostly solid mass which was oval, weighed 525 Gm. and measured 12.5 by 9 by 8 cm. On cut section the solid part was white with a lobular pattern with areas of necrosis. In the cystic area there was bloody fluid. Over the surface of this mass a tubelike structure was identified which was the oviduct. The microscopic description consisted of multiple sections of ovarian tumor composed of masses of anaplastic cells with marked pleomorphism. In some areas the cells were multinucleated and formed a syncytial giant cell pattern. These cells resembled the syncytial cells of trophoblastic tissue. Sections through the small breast mass which was removed were those of a lymph node. The pathological diagnosis was choriocarcinoma of the ovary.

Fig. 1. — The tumor mass following its removal.

Microscopic sections of the tumor were sent to the Armed Forces Institute of Pathology and also to the Pathology Department of the Henry Ford Hospital. Both institutions confirmed the diagnosis of choriocarcinoma of the ovary.

In October 1963, a 24 hour urine specimen was sent to Dr. Mortimer B. Lipsette, head of the endocrinology service at the National Cancer Institute in Bethesda, Md. The specimen submitted had a gonadotropin titer of less than 200 mouse uterine units. It was suggested that if the gonadotropins were negative, urinary gonadotropin levels at six week intervals should be run over the next six months. If at any time the gonadotropin titer increased, the National Cancer Institute would be willing to see the patient or help in taking care of her in any way possible. A subsequent urinary gonadotropin assay was completely negative.

The patient was last seen on March 9, 1965. She was then eight years of age and doing well in school. The mother stated that she had experienced no further uterine

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bleeding and thought that her secondary sex characteristic had somewhat regressed. The child appeared slightly thinner at this visit, although her weight was up to 70 pounds, probably because of increased height. Scant pubic hair growth was present, but was thought to be less than previously noted. The breasts seemed to have regressed slightly, but still some fullness was noted over the normal. The external genitalia with enlarged labia and clitoris appeared as before. The lower abdominal midline scar was well healed and no masses were felt in the abdomen. Urinary gonadotropin assay was completely negative. X-ray of the chest was unremarkable.

Summary

A case of nongestational choriocarcinoma of the ovary occurring in a seven year old child is reported. In follow-up reliance was placed on the quantitative test for chorionic gonadotropin hormone.

References

1. Hertig, A. T., and Mansell, H.: Tumors of the Female Sex Organs, Section IX, Armed Forces Institute of Pathology, Washington, D. C., 1952.
2. Turner, H. B.; Douglas, W. M., and Gladding, T. C.: Choriocarcinoma of the Ovary, Obst. & Gynec. 24:918-920 (Dec.) 1964.

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ERRATUM

Table I which appeared on page 716 of the October Journal in the article "An Assessment of Gastric Analysis," by Drs. Arvey I. Rogers, Norman J. Blum and Martin H. Kalser is being reproduced as the table did not designate by symbol less than or greater than 30 years of age.

Table 1.[7,14] — Results in Normals and Duodenal Ulcer
(Expressed in milliequivalents per hour)

	BASAL		POSTHISTAMINE (0.04 mg/kg)	
	NORMAL*(7)	ULCER†(14)	NORMAL*(7)	ULCER†(14)
All ages	0-6 (1.2)	0.1-17.9 (3.0)‡	0.1-25(8)	15-82 (37)‡
<30	0-6 (2.9)**	0.7-9.9 (2.5)	8.8-25 (14)	23-56 (35)
>30	0-3 (0.75)	0.1-17.9(3.0)	0.1-22.5 (7)	15-82 (37)

Parentheses denote mean values.
*Sexes combined—mean values for females usually 3 to 4 mEq/hr. less than for males.
**Females in this age group have slightly higher basal outputs.
†Calculation in milliequivalents per hour arrived at by multiplying the two highest successive 15 minute collections in milliequivalents ("peak rate") by two. (After Baron.[14])
‡Female outputs in basal collection averaged 1 to 2 mEq. lower than for males; after histamine stimulation, outputs averaged 10 mEq. lower than for males.

The following paragraph which appeared on page 717 of the same article should read as corrected:

Recognition of the Zollinger-Ellison Syndrome.—The association of pancreatic non Beta-cell Islet-cell adenoma with gastric hypersecretion and the tendency to form recurrent, resistant, unusually placed, often multiple ulcers of the stomach and duodenum and rarely jejunum has been termed the Zollinger-Ellison syndrome.

President's Page

The White House Conference on Health

On November 3 and 4, 1965, President Lyndon Johnson called a conference "to bring together the best minds and the boldest ideas to deal with the pressing health needs of this nation."

Secretary of Health, Education, and Welfare, John W. Gardner, said the new law establishes federal responsibility for health care which he wishes to administer without federal domination. Assistant Secretary, Dr. Philip Lee, asserted that quality health services must be available to every person who needs them. The Surgeon General, Dr. William Stewart, spoke on marshalling and coordinating health forces.

Panel discussions were concerned with the subjects of: Health Manpower Needs, Trends in Basic Professional Education, Trends in Continuing Professional Education, Responsibility for Teaching and Research, Role of Allied Health Professions, Economics of Health Professions Education, New Knowledge and Its Application, Delivery of Health Care, Economics of Health Care, Quality of Health Care, Community Health Care Planning, Special Health Care Needs, Consumer Protection, Accident Prevention, Environmental Health, Mental Health, Family Planning, and Health Promotion.

"Health care is a basic human right" was a statement frequently made. The need for more medical manpower, adequate financing, community planning of coordinated health facilities, control of pollution, and emphasis on preventive health was stressed.

The panel on "Trends in Continuing Professional Education" failed to mention nonuniversity hospitals and medical staffs as "resources." They were quickly corrected by the participating audience and congratulated for their recommendations which were interpreted as "cracking the shell of the ivory tower" of medical schools.

Your representative observed, "The full and early implementation of Title XIX by the states to insure the medical needs of their welfare recipients and needy sick through insurance carriers paying vendors adequately for services rendered will obviate many of the problems in planning for the expansion of medical facilities, quality of medical care, and continuing medical education."

Later, although concurring in the need for improving the environment we have messed up and preventing pollution, he quoted Robert Louis Stevenson, "For no man lives in the hard external world among the salts and acids, but in the warm phantasmagoric chamber of his brain, with the storied walls and painted windows."

Just prior to the White House Conference, your Task Force, in its second meeting took action resulting in:

1. Notifying the Secretary of Health, Education, and Welfare that the Florida Medical Association nominated Blue Shield to be the carrier for Voluntary Supplemental Medical Insurance under the provisions of Title XVIII B, Public Law 89-97.
2. Application to the Surgeon General for approval of a Florida Medical Association project to make a statewide coordinated plan for the development of medical facilities under the provisions of Public Law 89-97, Heart Disease, Cancer and Stroke.
3. Preparation of a plan to present to the Governor and Cabinet urging the implementation of Title XIX in Florida on July 1, 1966 in order to provide more adequate medical care for the needy sick.

In order to achieve better health care, practicing physicians must play an active and vital role in developing solutions to the many health care problems or suffer the fate of being downgraded and upstaged by those who do.

SE LA GUERRA!

H. Phillip Hampton

Editorials

The Truth of Christmas

Our world is greatly in need of recovering the sheer, unadorned beauty of the true meaning of Christmas. When we gloss over that, then we are truly missing something, for this is the season in which all of us ought to see the greatness of God in a little child. In Matthew's account of the birth of Christ, we read in chapter 1, verses 23-25, these words, "Behold, a virgin shall be with child, and shall bring forth a son, and they shall call His name, Emmanuel, which being interpreted is, God with us. . . . she brought forth her firstborn son; and he called His name Jesus." In this simple Bible statement, we have the profound truth of Christmas presented to us. May I venture to point out three things contained in it?

1. A young woman became mother of a child without having a husband or committing adultery! This is the grand truth of Christmas. Do not dwell upon the physiological impossibility and cover up the holy mystery, but on the other hand, believe the divine miracle presented to us. He is a "child without a mother in Heaven and without a father on earth." He is Lord of all flesh, and then born of it. He is Master of the sun, and yet dwelling under it. He was Maker of the earth, and lived upon it. Robed in Heavenly garments, He was wrapped in swaddling clothes. The Word of God became a speechless Babe. The Creator of the world became a creature. The Ruler of the world became a subject. Here was Omnipotence laid in a manger and later nailed to a cross. What a miracle and mystery the Incarnation! This is what God would say to us in our observance of Christmas.

2. Emmanuel, the King of the universe, is with us. This means that we will never be forsaken. Even the Christmas angels, so common in our decoration, ought to be a vivid reminder that God's guardian angel will never forsake us. Angels visited and ministered unto Christ in every great crisis of His earthly experience. They were present at His birth, during His temptation in the wilderness and in the ordeal of Gethsemane. Likewise, the very word, "Emmanuel," assures us of divine help in our wilderness of temptation, in our great choices of life, and even in the shadow of death. The promise of Jesus at the end of the way to His disciples is ever old, but ever new, "Lo, I am with you alway, even unto the end of the world." Christmas means that God has come down to strengthen and to live with His people.

3. A final and eternally significant message of Christmas is that God has come into the world to liberate us from our prison houses of sin and darkness. The angel said to Joseph, "Thou shalt call His name Jesus, for He shall save His people from their sins." Hundreds of years before the advent of the Saviour, the prophet Isaiah struck this note in referring to the coming Messiah, "A light of the Gentiles . . . to bring out the prisoners from the prison, and them that sit in darkness out of the prison house." Again, in Isaiah 61:1-2, we find the words which Jesus later took as He made His first appearance in the synagogue in Nazareth proclaiming that God had sent Him to "proclaim liberty to the captives, and the opening of the prison to them that are bound." Surely, here is the very heart and soul of the gospel. Christmas means that God in Christ has come down to "seek and to save that which was lost."

Yes, as we observe Christmas, let us get beyond the surface and let our souls vibrate once more in the profound truth of Christmas day.

Henry A. Parker, Th.D., Pastor
The First Baptist Church
Orlando

Editor's Note: This is the fifth in a series of invited guest editorials appropriate to the season by leading ministers and rabbis published in the hope that physicians will find these messages a source of guidance and inspiration.

Medicine: Too Good For Its Own Good?

Historians estimate that the sum total of human knowledge doubled between the time of Christ and 1750, then doubled again in 1900, 1950, 1960 and 1965. This "knowledge explosion," as Dr. Robert H. Spiro, president of Jacksonville University, terms it, is nowhere more evident than in the field of medicine, where discoveries pile upon each other so fast that the average doctor is not able to keep up with them. Paradoxically, this knowledge explosion in medicine as a science may be endangering medicine as an independent profession, in the sense that it has been since man became a tool-making, and a scalpel making animal. In fact, the day may be already upon us when the average physician will begin to ask whether medicine as a science is too good for the good of medicine as a calling. Paradoxic as the question may seem at first glance, a look at what is happening in other areas of human experience seems to support an affirmative answer. All of which makes it vitally important now to take measures to help the profession keep pace and, it is to be hoped, take the lead from the science.

The amazing scientific and industrial progress of America has been mainly the result of our capitalistically oriented economy, with its emphasis on growth, the increased development of manual skills, automation and increased production. Yet even as we advance—in production, in income, in time for leisure, in education—we can no longer evade the fact that every advance is gained at the expense of a tiny fragment of personal freedom. As this is written, a single union has shut down the greatest newspaper in America, in an attempt to hold back increased automation of its operation and the resultant savings in costs. Reason and history indicate that this last ditch attempt to halt progress in the newspaper industry will be about as successful as King Canute was in stopping the advance of the waves and the tide.

The problem of providing increasingly costly medical care for the whole population is far greater than that of operating a single newspaper, not only because that population is growing at the moment, but because its nature is changing drastically all the time, becoming more urban, with all the crises that urban living on a large scale creates. The problems of removing waste, providing transportation, police protection and education, while combating the poverty that grows in the centers of our cities like a cancer, are well nigh unsolvable and can only be tackled on a large scale, usually with increasing federal aid. Perhaps more important, the changing character of American life is changing its philosophy of living. Fifty years ago, the young man was concerned chiefly with getting ahead; today he worries about security, for today and for his old age.

With all this change going on, the medical profession, by its very nature, cannot but find itself in the middle of a rushing stream. The discovery of better ways to keep people alive and healthy can never be divorced from the need to find ways of making those discoveries freely available to everyone, at a price he can pay. The idealistic core of medicine is bound up in that tenet and has been for at least sixteen thousand years, since the first medicine man was portrayed on the walls of a cave at Trois Freres in France. The problem now is how to keep the ideals and the individualism that have kept medicine strong from being throttled, like Laocoön, by the serpents which creep behind industrialization and urbanization, waiting to seize the unwary.

A new biography of Elizabeth Garret Anderson, first woman to be admitted to the full privileges of medical practice in England—and only a century ago—illustrates once again the remarkable obtuseness the medical profession has traditionally displayed in resisting social change, until the tide engulfs it. The recently enacted Medicare law may be another example. Twenty-five years ago, this writer proposed a system of prepaid medical care which still preserved the individual freedom and pride of the medical profession—and was roundly trounced by the "Establishment" of that day for his pains. Yet hardly more than a decade later, the doctor-sponsored Blue Cross and Blue Shield plans followed many of the lines he had proposed. At the risk of getting slugged one last time, he suggests that the Medicare system—for it is law—be used as a laboratory in which to acquire a badly needed knowledge explosion in the fields of medical sociology and economics. It is a field still largely ignored by our medical schools, but a young doctor could well learn more about the forces that are to determine, in a few decades, whether or not he shall be a salaried government employee and spend less time learning to write prescriptions, in an age when most medicines are prepackaged and the druggist's big-

gest job is typing a label and pasting it over the one put there by the manufacturer.

Let those who will refuse to take part in Medicare; it is their right— for awhile, until that greatest of all mind-changers, the dollar, exerts its convincing spell. But let the rest take the lead in proposing the changes that must be made, making them intelligently without waiting for them to be made by bureaucrats, by a committee in a hurry to obey a presidential mandate, or by politicians looking only for votes.

Medicine can never be too good for its own good, of course—so long as the profession is kept as amenable to necessary and inevitable change as the science has always been.

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JACKSONVILLE

Editor's Note: This is the thirteenth consecutive year The Journal has published a guest editorial in December by Dr. Slaughter, Florida's distinguished physician-author.

The Prevailing Fee Concept

At its September meeting the Board of Governors of the Florida Medical Association urged that medicine's own corporation—Blue Shield of Florida—explore the idea of implementing a relatively new concept in the field of prepayment for the medical and surgical expenses incurred by the residents of Florida. This concept, called the Prevailing Fee Program, is based on the fact that a physician will be free to bill his patient the usual charge for services rendered and will receive from Blue Shield payment based on the usual charge.

By way of reminder, the "usual" charge is the charge which an individual physician would bill for a specified procedure for most of his patients—in other words, the going rate for a particular procedure. The Prevailing Fee Program is based on the fact that at least 90% of the physicians in a given area will be able to receive their usual charge for a specified procedure.

This Prevailing Fee Program has been initiated by physicians and the National Association of Blue Shield Plans at the behest of large groups of subscribers such as the automobile manufacturers and the steel producers. These national groups which purchase health insurance coverage for their employees on a nationwide basis are strongly seeking full coverage of the covered health service charges billed to their employees, and these large purchasers of health insurance expressed the belief that Blue Shield—the partner of physicians—is in the best possible position to provide full coverage of the predictable health care costs of the employees and their dependents.

Another reason for the rapid growth of the Prevailing Fee Concept is the fact that many physicians dislike the idea of fixed fee schedules, and they wish to be free to bill their usual charge for services rendered which they believe most nearly suits their purpose.

Both the large group purchasers of prepayment insurance and the physicians most directly concerned with Blue Shield know that there has to be an element of predictability in any prepaid health care program and they know there has to be some precautionary brake on what can be paid out in the way of benefits. The Prevailing Fee Concept has this precautionary brake in the fact that the upper 8% to 10% of physicians in a particular area do not receive their usual charge, but receive an indemnity payment from the Plan for services rendered and they are free to bill the patient for the remainder of their usual charge. Under the Prevailing Fee Concept, about 90% of all the physicians receive "in full" their usual charge.

Where this Prevailing Fee Concept has been tried out, for example, in Illinois, Pennsylvania, Kentucky and Texas, the physicians are more than satisfied with the entire concept. They have expressed the belief that the Prevailing Fee Program is more fully attuned to the physicians' way of practicing medicine wherein each physician is free to determine his own level of charges.

Getting down to the practical aspects of this Prevailing Fee Program, the Florida Medical Association is surveying each physician and asking that he submit his usual charge for 30 to 40 of his most frequently done procedures. When these stated charges billed by the physician are submitted to the Florida Medical Association, an IBM computer will be fed the information for all of the physicians and the Florida Medical Association and Blue Shield of Florida will be able to determine mathematically a range of charges for, by way of example, a tonsillectomy, an appendectomy, or a cholecystectomy. When these stated charges have been compiled, Blue Shield will be able to predict the "rate" which will have to be charged the consumer who desires to purchase this Prevailing Fee Program.

It might interest you to know that the Prevailing Fee Concept wherein about 90% of the

physicians receive their usual charge is determined on the basis of economic areas of a like nature. For example, Florida may be broken down into three or 10 economic areas. The accepted charge for a tonsillectomy may be higher in South Florida than it is in North Florida and this difference will be reflected in the payment to the physicians and in the rate charged the particular group in that economic area. We do not know as yet how these economic areas will be determined, but they will be based upon economic and social considerations which serve the best interests of medicine.

In the near future, every member of the Association will receive a communication from the headquarters office outlining some of the basic premises of the Prevailing Fee Concept and asking each physician to complete a statistical form showing his usual charges for most of his patients for those procedures which the physician does most frequently. When you receive this communication, I hope you will give it every consideration, complete the requested information as soon as practicable, and return it to the Association at your earliest convenience.

As we face greater and greater governmental control and consider the possibility of having controls even greater than those now in effect, it is becoming more and more imperative that practicing physicians should be able to charge their own fee-for-service. Each physician should be free to collect the going charge in his community and for the physician who has had years of experience, he also should be permitted to set his fees at a rate which is perhaps commensurate with his own unique training and experience. This ability to charge the going rate and the ability to base this charge on experience and training are combined in the Prevailing Fee Concept. If each physician determines his own charges and establishes his own personalized fee schedule, he will continue to have the privilege of preserving as much as possible of the free enterprise system in American medicine.

The leadership of our Association is doing everything in its power to preserve the fee-for-service concept, the free choice of physician by patient, and the American way of providing medical care on an individual basis between one physician and one patient. It is my personal belief that this Prevailing Fee Concept will do much to strengthen the private practice of medicine.

Russell B. Carson, M.D.
Fort Lauderdale

What Florida Alcoholic Rehabilitation Program Means to You

As a physician practicing in Florida it is imperative that you are informed about your state Alcoholism Program and how it can help you in your daily practice of medicine.

First, a brief description of the Florida Alcoholic Rehabilitation Program (FARP) is in order.

1. Physical Plant: The FARP consists of a 64 bed, modern hospital, exclusively for alcoholics, located at Avon Park. In addition, the Program is composed of outpatient alcoholic clinics around the state. They are located in Miami, Orlando, Tampa, Jacksonville and Pensacola.

2. Staff: The clinics and the inpatient facilities at Avon Park are each staffed by psychiatrists, internists, social workers and psychologists. At the Avon Park Center additional staff members include a chaplain, nurses, medical aides, occupational and recreational therapists, an alcoholism counselor, and social work aides.

3. Financing: The Program is financed by the State of Florida through monies received from taking approximately 1% of the tax collected by the state on the sale of distilled spirits.

4. The general treatment program is similar for both inpatient and outpatient facilities, except that the inpatient facility can offer much more intensive treatment since the patient is there 24 hours a day. Treatment techniques include numerous types of group therapy, individual medical treatment and psychotherapy. The Avon Park Center also offers psychodrama, chaplain counseling, alcoholism counselor interviews, occupational and recreational therapy and other special treatment techniques.

5. The FARP works closely with Alcoholics Anonymous and weekly meetings of AA are held in the Avon Park Center.

6. Any alcoholic who has been a resident of Florida for one year is eligible for treatment. Any Florida physician can refer a patient to one of the clinics for treatment.

Having given this very brief outline of the Program, I wish to stress one point. Florida has an estimated 160,000 alcoholics; one out of every 33 persons in the state is suffering from alcoholism. The Florida State Alcoholic Rehabilitation Program working with superb efficiency can hope to treat no more than 5 to 10% of these people.

That leaves 90 to 95 per cent that the State Program cannot hope to treat. Who, then, does treat the rest of this group? You, the physicians of Florida do. At least many of them. You treat their ulcers, broken bones, pneumonia, D. T's., depressions, and other ills. Whether or not you ignore their concomitant alcoholism, it is there. And if you do not treat their alcoholism, it will usually get progressively worse.

How can the Florida Alcoholic Rehabilitation Program help you treat the alcoholics you have in your practice today and will see tomorrow? You have many of them in your practice today, because you've taken out their appendix, delivered their babies, treated their ulcers, and they're still your patients—your alcoholic patients. A small per cent of your alcoholic patients the FARP can treat for you. Another small per cent the FARP can treat with you. But the great majority you will have to continue treating without direct aid from the FARP.

Again, in addition to accepting your referrals and cooperating in the direct treatment of a specific patient, what can the FARP do to help you with your job? It can show you the latest methods of treating the alcoholic. The FARP can provide you with literature and reliable references on the subject. If enough private practitioners in the state indicate interest in learning more about the treatment of alcoholics, special seminars and training programs can be set up to delve into the details of treatment. The FARP can cooperate in symposiums on alcoholism. A program is being arranged with the Department of Psychiatry at the University of Miami School of Medicine to rotate its residents through the FARP Clinic in Miami and the Center in Avon Park. The Program hopes to do likewise with residents in other specialties and at the University of Florida College of Medicine. In other words, the FARP is available as a training program. But it cannot carry out this function without the full cooperation of Florida's medical community.

In summary, the problem of alcoholism in Florida is gigantic, but the tools to treat alcoholics successfully are available. Let us cooperate to see that these tools are used to the fullest extent.

RONALD J. CATANZARO, M.D., MEDICAL DIRECTOR
FLORIDA ALCOHOLIC REHABILITATION PROGRAM
AVON PARK

Association News

LEGAL COUNSEL

Editor's Note: The following discussion of the requirements of the Civil Rights Act affecting physicians was furnished by the Association's legal counsel, Harry T. Gray, Esq., of the firm Marks, Gray, Yates, Conroy & Gibbs of Jacksonville. While your Editors believe it will be informative to our readers, it should be pointed out that the status of the Act's implementation in the areas in question remained uncertain at the time this issue of The Journal went to press.

T.M.

While as of now all the ramifications of the Civil Rights Act as applied to physicians who undertake to render professional services to persons entitled to benefits under a federally assisted health program are unpredictable, some procedures for physicians may be suggested. Undoubtedly, if a physician is to be paid for his services under such a program, he must comply with whatever requirements are established by the state agency which administers the program under which the physician's services were rendered.

The Florida Medical Association is seeking through direct contact with the agencies in Florida to work out appropriate and satisfactory requirements of compliance. Announcements will be made by the Association as information becomes available.

Recently the Department of Health, Education, and Welfare indicated it will accept a suggested form of notice, printed on the back of the claim form or voucher, used by the physician in seeking payment for his services, as sufficient indication of compliance. The physician is not required to sign this notice on the back of the form. The state agency determines the physician is in compliance and the agency alone assures of compliance by the physician with the law and regulations thereunder.

While the effect of noncompliance when rendering services has not been judicially determined or clarified by any official rule of HEW, should a physician accept payment for his services under such a federally assisted health program, he will be presumed to have rendered his services without engaging in any discrimination or segregation based on race, color or national origin in his acceptance or treatment of persons for which payment is sought. What penalties arise should physicians seek and accept payment under such a program for his professional services rendered when he had in fact engaged in some prohibited discrimination or segregation, is not specifically delineated in the Civil Rights Act. While many penalties are in the Act, no specific penalty provision is found for the acceptance of payment by a noncomplying physician, should it be determined thereafter the acceptance of payment by the physician for services under such programs occurred when he had engaged in some discrimination or segregation in a manner prohibited by the Act. This acceptance, no doubt, will be held to be improper or unlawful. This physician may be subjected to attempts for the recovery of payments made, either by direct legal procedures against him or by indirect procedures such as withholding future payments he seeks, pending adjustment of the existing problem.

The American Medical Association through its House of Delegates has resolved that the refusal of a physician to sign a written oath of compliance does not violate the law; but the refusal to sign is different from the acceptance of payments under a factual situation amounting to discrimination or segregation by the physician in performing services. Each physician should seek the establishment of procedures in his offices, when rendering services under such federally assisted programs, to eliminate such a problem.

MARKS, GRAY, YATES, CONROY & GIBBS
LEGAL COUNSEL, FLORIDA MEDICAL ASSOCIATION

Others Are Saying

The Crucifixion of Jesus

The Passion of Christ from a Medical Point of View

C. Truman Davis, M.D., M.S.
MESA, ARIZONA

In this paper, I shall discuss some of the physical aspects of the passion, or suffering, of Jesus Christ. We shall follow Him from Gethsemane, through His trial, His scourging, His path along the Via Dolorosa, to His last dying hours on the cross.

I became interested in this about a year ago when I read an account of the crucifixion in Jim Bishop's book, The Day Christ Died. I suddenly realized that I had taken the Crucifixion more or less for granted all these years—that I had grown callous to its horror by a too easy familiarity with the grim details—and a too distant friendship with Him. It finally occurred to me that as a physician I didn't even know the actual immediate cause of death. The Gospel writers don't help us very much on this point, because crucifixion and scourging were so common during their lifetime that they undoubtedly considered a detailed description totally superfluous—so we have the concise words of the Evangelists: "Pilate, having scourged Jesus, delivered Him to them to be crucified—and they crucified Him."

I am indebted to many who have studied this subject in the past, and especially to a contemporary colleague, Dr. Pierre Barbet, a French surgeon who has done exhaustive historical and experimental research and has written extensively on the subject.

The infinite psychic and spiritual suffering of the Incarnate God in atonement for the sins of fallen man I have no competence to discuss; however, the physiological and anatomical aspects of our Lord's passion we can examine in some detail . . . what did the body of Jesus of Nazareth actually endure during those hours of torture?

This led me first to a study of the practice of crucifixion itself; that is, the torture and execution of a person by fixation to a cross. Apparently, the first known practice of crucifixion was by the Persians. Alexander and his generals brought it back to the Mediterranean world—to Egypt and to Carthage. The Romans apparently learned the practice from the Carthaginians and (as with almost everything the Romans did) rapidly developed a very high degree of efficiency and skill in carrying it out. A number of Roman authors (Livy, Cicero, Tacitus) comment on it. Several innovations and modifications are described in the ancient literature; I'll mention only a few which may have some bearing here. The upright portion of the cross (or stipes) could have the cross-arm (or patibulum) attached two or three feet below its top—this is what we commonly think of today as the classical form of the cross (the one which we have later named the Latin cross); however, the common form used in our Lord's day was the Tau cross (shaped like the Greek letter Tau or like our T). In this cross the patibulum was placed in a notch at the top of the stipes. There is fairly overwhelming archeological evidence that it was on this type of cross that Jesus was crucified.

The upright post, or stipes, was generally permanently fixed in the ground at the site of execution and the condemned man was forced to carry the patibulum, apparently weighing about 110 pounds, from the prison to the place

of execution. Without any historical or biblical proof, medieval and Renaissance painters have given us our picture of Christ carrying the entire cross. Many of these painters and most of the sculptors of crucifixes today show the nails through the palms. Roman historical accounts and experimental work have shown that the nails were driven between the small bones of the wrists and not through the palms. Nails driven through the palms will strip out between the fingers when they support the weight of a human body. The misconception may have come about through a misunderstanding of Jesus' words to Thomas, "Observe my hands." Anatomists, both modern and ancient, have always considered the wrists as part of the hand.

A titulus, or small sign, stating the victim's crime was usually carried at the front of the procession and later nailed to the cross above the head. This sign with its staff nailed to the top of the cross would have given it somewhat the characteristic form of the Latin cross.

The physical passion of the Christ begins in Gethsemane. Of the many aspects of this initial suffering, I shall only discuss the one of physiological interest; the bloody sweat. It is interesting that the physician of the group, St. Luke, is the only one to mention this. He says, "And being in agony, He prayed the longer. And his sweat became as drops of blood, trickling down upon the ground."

Every attempt imaginable has been used by modern scholars to explain away this phase, apparently under the mistaken impression that this just doesn't happen.

A great deal of effort could be saved by consulting the medical literature. Though very rare, the phenomenon of Hematidrosis, or bloody sweat, is well documented. Under great emotional stress, tiny capillaries in the sweat glands can break, thus mixing blood with sweat. This process alone could have produced marked weakness and possible shock.

We shall move rapidly through the betrayal and arrest; I must stress again that important portions of the Passion story are missing from this account. This may be frustrating to you, but in order to adhere to our purpose of discussing only the purely physical aspects of the Passion, this is necessary. After the arrest in the middle of the night, Jesus was brought before the Sanhedrin and Caiaphas, the High Priest; it is here that the first physical trauma was inflicted. A soldier struck Jesus across the face for remaining silent when questioned by Caiaphas. The palace guards then blindfolded Him and mockingly taunted Him to identify them as they each passed by, spat on Him, and struck Him in the face.

In the early morning Jesus, battered and bruised, dehydrated, and exhausted from a sleepless night, is taken across Jerusalem to the Praetorium of the Fortress Antonia, the seat of government of the Procurator of Judea, Pontius Pilate. You are, of course, familiar with Pilate's action in attempting to pass responsibility to Herod Antipas, the Tetrarch of Judea. Jesus apparently suffered no physical mistreatment at the hands of Herod and was returned to Pilate. It was then, in response to the cries of the mob, that Pilate ordered Bar-Abbas released and condemned Jesus to scourging and crucifixion. There is much disagreement among authorities about scourging as a prelude to crucifixion. Most Roman writers from this period do not associate the two. Many scholars believe that Pilate originally ordered Jesus scourged as his full punishment and that the death sentence by crucifixion came only in response to the taunt by the mob that the Procurator was not properly defending Caesar against this pretender who claimed to be the King of the Jews.

Preparations for the scourging are carried out. The prisoner is stripped of His clothing and His hands tied to a post above His head. It is doubtful whether the Romans made any attempt to follow the Jewish law in this matter of scourging. The Jews had an ancient law prohibiting more than forty lashes. The Pharisees, always making sure that the law was strictly kept, insisted that only thirty-nine lashes be given. (In case of a miscount, they were sure of remaining within the law.) The Roman legionnaire steps forward with the flagrum (or flagellum) in his hand. This is a short whip consisting of several heavy, leather thongs with two small balls of lead attached near the ends of each. The heavy whip is brought down with full force again and again across Jesus' shoulders, back and legs. At first the heavy thongs cut through the skin only. Then, as the blows continue, they cut deeper into the subcutaneous tissues, producing first an oozing of blood from the capillaries and veins of the skin, and finally spurting arterial bleeding from vessels in the underlying muscles. The small balls of lead first produce large, deep bruises which are broken open by subsequent blows. Finally the skin of the back is hanging in long ribbons and the entire area is an unrecognizable mass of torn, bleeding tissue. When

it is determined by the centurion in charge that the prisoner is near death, the beating is finally stopped.

The half-fainting Jesus is then untied and allowed to slump to the stone pavement, wet with His own blood. The Roman soldiers see a great joke in this provincial Jew claiming to be a king. They throw a robe across His shoulders and place a stick in His hand for a scepter. They still need a crown to make their travesty complete. A small bundle of flexible branches covered with long thorns (commonly used for firewood) are plaited into the shape of a crown and this is pressed into His scalp. Again there is copious bleeding (the scalp being one of the most vascular areas of the body.) After mocking Him and striking Him across the face, the soldiers take the stick from His hand and strike Him across the head, driving the thorns deeper into His scalp. Finally, they tire of their sadistic sport and the robe is torn from His back. This had already become adherent to the clots of blood and serum in the wounds, and its removal, just as in the careless removal of a surgical bandage, causes excruciating pain . . . Almost as though He were again being whipped—and the wounds again begin to bleed.

In deference to Jewish custom, the Romans return His garments. The heavy patibulum of the cross is tied across His shoulders, and the procession of the condemned Christ, two thieves and the execution detail of Roman soldiers, headed by a centurion, begins its slow journey along the Via Dolorosa. In spite of His efforts to walk erect, the weight of the heavy wooden beam, together with the shock produced by copious blood loss, is too much. He stumbles and falls. The rough wood of the beam gouges into the lacerated skin and muscles of the shoulders. He tries to rise, but human muscles have been pushed beyond their endurance. The centurion, anxious to get on with the crucifixion, selects a stalwart North African onlooker, Simon of Cyrene, to carry the cross. Jesus follows, still bleeding and sweating the cold, clammy sweat of shock. The 650 yard journey from the Fortress Antonia to Golgotha is finally completed. The prisoner is again stripped of His clothes—except for a loin cloth which is allowed the Jews.

The crucifixion begins. Jesus is offered wine mixed with Myrrh, a mild analgesic mixture. He refuses to drink. Simon is ordered to place the patibulum on the ground and Jesus is quickly thrown backward with His shoulders against the wood. The legionnaire feels for the depression at the front of the wrist. He drives a heavy, square, wrought-iron nail through the wrist and deep into the wood. Quickly, he moves to the other side and repeats the action, being careful not to pull the arms too tightly, but to allow some flexion and movement. The patibulum is then lifted in place at the top of the stipes and the titulus reading *"Jesus of Nazareth, King of the Jews"* is nailed in place.

The left foot is pressed backward against the right foot, and with both feet extended, toes down, a nail is driven through the arch of each, leaving the knees moderately flexed. The Victim is now crucified. As He slowly sags down with more weight on the nails in the wrists, excruciating, fiery pain shoots along the fingers and up the arms to explode in the brain—the nails in the wrists are putting pressure on the median nerves. As He pushes Himself upward to avoid this stretching torment, He places His full weight on the nail through His feet. Again there is the searing agony of the nail tearing through the nerves between the metatarsal bones of the feet.

At this point, another phenomenon occurs. As the arms fatigue, great waves of cramps sweep over the muscles, knotting them in deep, relentless, throbbing pain. With these cramps comes the inability to push Himself upward. Hanging by His arms, the pectoral muscles are paralyzed and the intercostal muscles are unable to act. Air can be drawn into the lungs, but cannot be exhaled. Jesus fights to raise Himself in order to get even one short breath. Finally, carbon dioxide builds up in the lungs and in the blood stream and the cramps partially subside. Spasmodically, He is able to push Himself upward to exhale and bring in the life-giving oxygen. It was undoubtedly during these periods that He uttered the seven short sentences which are recorded.

The first, looking down at the Roman soldiers throwing dice for His seamless garment, "Father, forgive them for they know not what they do."

The second, to the penitent thief, "Today thou shalt be with me in Paradise."

The third, looking down at the terrified, grief stricken, adolescent John, (the beloved Apostle), He said, "Behold thy mother," and looking to Mary, his mother, "Woman, behold thy son."

The fourth cry is from the beginning of the 22nd Psalm, "My God, my God, why hast thou forsaken me?"

Hours of this limitless pain, cycles of twisting, joint-rending cramps, intermittent partial asphixiation, searing pain as tissue is torn from His

lacerated back as He moves up and down against the rough timber: Then another agony begins. A deep crushing pain deep in the chest as the pericardium slowly fills with serum and begins to compress the heart.

Let us remember again the 22nd Psalm (the 14th verse), "I am poured out like water, and all my bones are out of joint: my heart is like wax; it is melted in the midst of my bowels."

It is now almost over—the loss of tissue fluids has reached a critical level—the compressed heart is struggling to pump heavy, thick, sluggish blood into the tissues—the tortured lungs are making a frantic effort to gasp in small gulps of air. The markedly dehydrated tissues send their flood of stimuli to the brain.

Jesus gasps His fifth cry, "I thirst."

Let us remember another verse from the prophetic 22nd Psalm: "My strength is dried up like a potsherd; and my tongue cleaveth to my jaws; and thou has brought me into the dust of death."

A sponge soaked in Posca, the cheap, sour wine which is the staple drink of the Roman legionnaires, is lifted to His lips. He apparently doesn't take any of the liquid. The body of Jesus is now in extremis, and He can feel the chill of death creeping through His tissues. This realization brings out His sixth words—possibly little more than a tortured whisper.

"It is finished."

His mission of atonement has been completed. Finally He can allow his body to die.

With one last surge of strength, He once again presses His torn feet against the nail, straightens His legs, takes a deeper breath, and utters His seventh and last cry, "Father, into thy hands I commit my spirit."

The rest you know. In order that the Sabbath not be profaned, the Jews asked that the condemned men be dispatched and removed from the crosses. The common method of ending a crucifixion was by crurifracture, the breaking of the bones of the legs. This prevented the victim from pushing himself upward; the tension could not be relieved from the muscles of the chest, and rapid suffocation occurred. The legs of the two thieves were broken, but when they came to Jesus they saw that this was unnecessary.

Apparently to make doubly sure of death, the legionnaire drove his lance through the fifth interspace between the ribs, upward through the pericardium and into the heart. The 34th verse of the 19th chapter of the Gospel according to St. John: "And immediately there came out blood and water." Thus there was an escape of watery fluid from the sac surrounding the heart and blood from the interior of the heart. We, therefore, have rather conclusive post-mortem evidence that Our Lord died, not the usual crucifixion death by suffocation, but of heart failure due to shock and constriction of the heart by fluid in the pericardium.

Thus we have seen a glimpse of the epitome of evil which man can exhibit toward man—and toward God. This is not a pretty sight and is apt to leave us despondent and depressed. How grateful we can be that we have a sequel: A glimpse of the infinite mercy of God toward man—the miracle of the atonement and the expectation of Easter morning!

Addendum: Dr. Davis is an ophthalmologist in private practice in Mesa, Arizona. He is a lay reader in the Episcopal Church.

The study of the Crucifixion is a portion of a manuscript on medicine and the Bible which is now in preparation for publication.

Reprinted from the March 1965 issue of Arizona Medicine.

CALLING ALL PHYSICIAN-SCIENTISTS!

Do you have some scientific information you would like to share with your Florida medical colleagues? Submit it for possible presentation on the scientific program of the 1966 Annual Meeting being held May 12-15 at the Diplomat Hotel, Hollywood.

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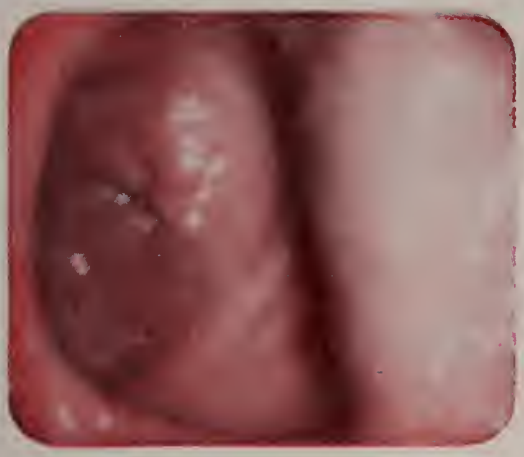

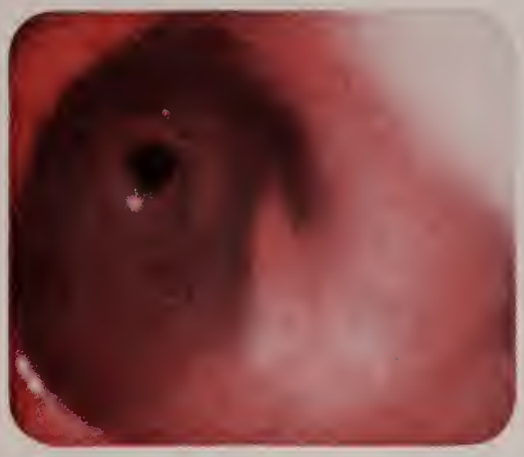

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1. Barowsky, H.; Greene, L., and Bennett, R.: Investigators' Clinical Report. Photographs courtesy of Drs. H. Barowsky, L. Greene and R. Bennett.
2. Barowsky, H.; Greene, L., and Paulo, D.: Paper read at Meeting of American Society for Gastrointestinal Endoscopy, Montreal, Canada, May 25-27, 1965.

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PHYSICIANS WANTED—GENERAL PRACTITIONERS: Fishing and hunting paradise-Lake County (1442 lakes). Small town practice. Association leading to partnership. First class hospital available. Larger city within 25 miles. Phone 429-6701, Groveland, Fla.

WANTED: Associate in General Practice, South Florida. Salary and percentage guaranteed. Florida license required. Good hospital available. Write C-660, P.O. Box 2411, Jacksonville, Fla. 32203.

GENERAL PRACTITIONER WANTED. To be only M.D. in Cape Canaveral office arranged to suit your desires. Hospital nearby; most attractive situation. Reply to H. H. Simms Jr., P.O. Drawer S, Cape Canaveral, Fla.

GENERAL PRACTITIONER or INTERNIST for long established clinic group. Contact T. C. Kenaston Jr., M.D., Kenaston Clinic, 501 Delannoy Ave., Cocoa, Fla.

WANTED: Associate for General Practice and traumatic surgery in well established and equipped medical clinic. Forty hours weekly. No house calls. No investment. Guarantee $20,000 yearly plus percentage. Can lead to eventual partnership. Florida license requisite. Owner must curtail practice due to health. Tice Medical Clinic, Ft. Myers, Florida.

GENERAL PRACTITIONER for new community of 6,000 and surrounding area of approximately 25,000. A new 50 bed general hospital now open. One GP and one surgeon now serving this community. Write Box 698, Lehigh Acres, Florida for further information.

PHYSICIAN NEEDED NOW: Nearest doctor 23 miles. Over 4,500 people in area. Quiet agricultural community. Air-conditioned office, rent free. Contact W. G. Croft, Jr., Rotary Club, Mayo, Florida.

GENERAL PRACTITIONERS (2) for independent practice in prosperous Southwest Georgia town. Excellent schools, churches, sportsman's paradise. Progressive medical staff and modern 200 bed hospital serving a radius of 50 miles. Contact Director, John D. Archbold Memorial Hospital, Thomasville, Georgia.

Specialists

WANTED: Pediatrician, ENT, Internist and Dermatologist for new medical building ready Feb. 15. Adjacent to hospital in beautiful location on Gulf of Mexico. Fine practice opportunity. Write C-510, P.O. Box 2411, Jacksonville, Fla. 32203

OBSTETRICIAN - GYNECOLOGIST WANTED: To associate with two man group. Large established practice in Miami; Board eligible or certified; prefer under age 35. Write P.O. Box 384, Miami Shores, Fla.

WANTED: Pediatrician, Dentist, Ophthalmologist, Surgeon. New medical building near 400 bed hospital, Sarasota, Fla. Exclusive residential area and high rise apartments. Write C-664, P.O. Box 2411, Jacksonville, Fla. 32203.

PEDIATRICIAN wanted for association with two obstetricians. Office space, basic equipment and guaranteed income are available for an acceptable man. Write C-551, P.O. Box 2411, Jacksonville, Fla. 32203

OPHTHALMOLOGIST WANTED: Full or part time. Medical or medical-surgical in Florida industrial seaport area. Florida license required. Salary and bonus commensurate with time worked and qualifications. Wonderful opportunity for semi-retiree. Reply credentials. C-659, P.O. Box 2411, Jacksonville, Fla. 32203.

INTERNIST: Board certified or eligible to join two well established Internists, Pompano Beach area. Financial arrangements open. Immediate. Contact J. E. Gordon, M.D., Pompano Beach 941-5629.

WANTED: Ophthalmologist interested in moving right into completely equipped downtown office and established practice or in purchasing all or part of the furnishings very reasonably. Must retire immediately on account of health. Contact R. R. Duke, M.D., 706 Franklin St., Tampa, Fla. 33602

WANTED: Internal Medicine associate because of oversupply of work. Florida license required, 35 years or under, married, stable character, terms open. Box 606, Hialeah, Florida.

Miscellaneous

MEDICAL DIRECTOR: For Gerontological Village near West Palm Beach, Florida. Work is stimulating in very pleasant surroundings. Salary $15,000 per year with paid vacations and excellent fringe benefits. Beautifully furnished residence with full maintenance included. Write C-661, P.O. Box 2411, Jacksonville, Fla. 32203

PHYSICIAN WANTED: Immediate opening for Florida Licensed physician in the Outpatient Department, Hillsborough County Hospital, 5906 - 30th St., Tampa, Fla. Approximately 40 hours week. Contact Dr. J. H. Moseley, Director, Outpatient Department.

PHYSICIANS WANTED: Florida State Board of Health has openings for energetic physicians interested in public health careers. American citizenship and eligibility for Florida medical licensure required. Salary range $15,000-$22,620; assistants $11,040-$19,020, dependent upon position and qualifications. Opportunity to live and work in subtropical climate in a dynamic public health program. Additional benefits include liberal travel allowance, vacation and sick leave; excellent retirement plan; group insurance. Write Wilson T. Sowder, M.D., State Health Officer, P.O. Box 210, Jacksonville, Fla.

SITUATIONS WANTED

PEDIATRICIAN AVAILABLE, Summer 1966. 33 years old, married with one child seeks association or partnership in Southeastern Florida area. University of Florida (BS) and Duke (MD) graduate. Military completed. Board certified and Florida licensed. C-663, P.O. Box 2411, Jacksonville, Fla. 32203

SURGEON—Board Certified, FACS; 15 years solo practice in large metropolitan city in Missouri; 2 children; desires association with an individual, group or institution in the state of Florida; vast experience in GYN; immediate availability. C-662, P.O. Box 2411, Jacksonville, Fla. 32203

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FOR RENT: Medical suite in medical building near two hospitals. Telephone or write Reese, Mason & Richardson Co., 1000 Riverside Ave. Phone 354-7771, Jacksonville, Florida.

Doctor's Office. New, fully partitioned. 1,150 sq. ft., 4306 University Boulevard South, Jacksonville, Florida. Call Dr. Long, 733-6332.

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MEDICAL SUITES FOR LEASE. Missouri Medical Center, Clearwater, Florida. Ample parking, centrally located. Floor plan to specification of tenants in new addition. Contact Fred J. Owens, 422 Harbor View Lane, Largo, Florida. Telephone 581-2565.

AVAILABLE FOR LEASE mid December: New modern building. Ideal location close to Baptist hospital, Jacksonville. $3 per square foot. Contact R. L. Reynolds, 3720 San Jose Blvd., Jacksonville 32207. Phone 359-5944 or 354-6651.

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Leesburg needs doctor for suite of offices. Redecorated, paved private parking, central heating and air-conditioning. 15,000 population and new general hospital nearby. Terms. Write C-665, P.O. Box 2411, Jacksonville, Fla. 32203

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AVAILABLE: Free-lance medical illustrator. Experienced. Knowledge of medical terminology. Accurate. Write: Mary Ellen Burch, 747 Catalonia Ave., Coral Gables, Fla. 33134.

The Florida Medical Association offers placement assistance through the Physician Placement Service, P. O. Box 2411, Jacksonville 32203. This service is for the use of physicians seeking locations, as well as physicians seeking associates and is without charge.

Announcing The Twenty-Ninth Annual Meeting of
THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

Conference Headquarters — Roosevelt Hotel
March 7, 8, 9, 10, 1966

GUEST SPEAKERS

Robert J. Rowe, M. D., Dallas, Tex.
Colon and Rectal Surgery
Walter C. Lobitz, Jr., M.D., Portland, Ore.
Dermatology
Bernard J. Haverback, M.D., Los Angeles, Calif.
Gastroenterology
Joseph J. Rupp, M.D., Philadelphia, Pa.
General Practice
Roy T. Parker, M.D., Durham, N. C.
Gynecology
Stefan S. Fajans, M.D., Ann Arbor, Mich.
Internal Medicine
John S. LaDue, M.D., New York, N. Y.
Internal Medicine
Joseph M. Foley, M.D., Cleveland, Ohio
Neurology
Duncan E. Reid, M.D., Boston, Mass.
Obstetrics
H. Saul Sugar, M.D., Detroit, Mich.
Ophthalmology
S. Benjamin Fowler, M.D., Nashville, Tenn.
Orthopedic Surgery
Walter P. Work, M.D., Ann Arbor, Mich.
Otorhinolaryngology
William O. Russell, M.D., Houston, Tex.
Pathology
William A. Silverman, M.D., New York, N. Y.
Pediatrics
C. Allen Good, M.D., Rochester, Minn.
Radiology
Louis M. Rousselot, M.D., New York, N. Y.
Surgery
Jerome A. Urban, M.D., New York, N. Y.
Surgery
Donald R. Smith, M.D., San Francisco, Calif.
Urology

Additional Speaker to be Announced

Lecture, symposia, clinicopathologic conferences, round-table luncheons, Medical motion pictures, technical exhibits and entertainment for visiting wives.

(All-inclusive registration fee — $25.00)
This program is acceptable for twenty-nine (29) accredited hours by the American Academy of General Practice.

The Clinical Tour AROUND THE WORLD visiting Hawaii, Tokyo, Nikko, Kyoto, Nara, Hong Kong, Bangkok, New Delhi, Agra, Jaipur, and Cairo. Leaving March 12 via air and returning April 12, 1966.

For information concerning the Assembly meeting and tour write Secretary, The New Orleans Graduate Medical Assembly, Room 1528, 1430 Tulane Avenue, New Orleans, Louisiana 70112.

News

John C. Finerty, Ph.D., associate dean of the University of Miami School of Medicine, recently was appointed dean of the Louisiana State University School of Medicine. Dr. Finerty, who has served since 1956 on the University of Miami faculty as professor of anatomy, chairman of the department of anatomy, assistant dean and associate dean, will assume his new duties in New Orleans early in 1966.

The department of psychiatry of the University of Miami School of Medicine will continue its annual series of seminars on psychiatry in medical practice beginning February 9, 1966. The seminars are given on Wednesday evenings from 8:00 to 10:00 p.m. Further information may be obtained from the Department of Psychiatry, Jackson Memorial Hospital, Miami 33136.

A postgraduate seminar in gastroenterology will be held March 11-13, 1966, at the Fontainebleau Hotel, Miami Beach. It will be sponsored by the departments of gastroenterology of the University of Miami School of Medicine and the Veterans Administration Hospital, Coral Gables. Theme of the seminar will be therapeutic controversies in common gastrointestinal disorders. Information and registration forms may be secured from Martin H. Kalser, M.D., School of Medicine, University of Miami, Jackson Memorial Hospital, Miami 33136.

The 29th annual meeting of the New Orleans Graduate Medical Assembly will be held March 7-10, 1966, at the Roosevelt Hotel, New Orleans. Featured will be 54 discussions on topics of current medical interest. Further details may be obtained by writing Secretary, New Orleans Graduate Medical Assembly, 1430 Tulane Avenue, Room 1528, New Orleans, Louisiana 70112.

The Louisiana State Medical Society is soliciting contributions to a "Betsy Fund" to aid physicians whose offices and homes were totally destroyed by the disastrous hurricane Betsy in September. Several physicians were completely wiped out by flood losses not covered by insurance, according to the Society. The appeal is being limited to the medical profession. Checks should be made to the Louisiana State Medical Society Betsy Fund, Room 1528, 1430 Tulane Avenue, New Orleans, Louisiana 70112.

Dr. Robert Zeppa recently was appointed chief of surgical service, Veterans Administration Hospital, Coral Gables, and professor of surgery, University of Miami School of Medicine. Prior to accepting the appointment, Dr. Zeppa was associate professor of surgery at the University of North Carolina School of Medicine, where he had been associated since 1953.

A postgraduate course entitled "Unresolved Problems in Cardiology" will be held January 20-22, 1966, at Mount Sinai Hospital, Miami Beach. Co-sponsors will be the American College of Cardiology, Mount Sinai Hospital and the University of Miami School of Medicine. Nine nationally known guest speakers will be featured. Informational brochures and other necessary details may be obtained by writing Executive Director, American College of Cardiology, 9650 Rockville Pike, Washington, D. C. 20014.

Members In The News

Dr. Jere W. Annis of Lakeland recently was elected president-elect of the American Association of Medical Clinics.

Dr. Ashbel C. Williams of Jacksonville recently was selected president-elect of the American Cancer Society. He has served since 1964 as chairman of that organization's medical and scientific committee.

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Contraindications: Pregnancy; leukemia, lymphoma and other generalized malignancies; brain damage in children under one year of age; febrile illness; allergy to egg proteins, neomycin, or streptomycin. Precautions: Use cautiously in patients with a history of tuberculosis and patients being treated with steroids, irradiation, alkylating agents, and antimetabolites. Consult package literature before administering Lirugen.

References:
1. Schwarz, A.J.F.: Amer. J. Dis. Child., **103:** 386-389, 1962.
2. Krugman, S. et al.: Pediatrics, **31:** 919-928, 1962.
3. Andelman, S. L. et al.: J.A.M.A., **184:** 721-723, 1963.
4. Measles Vaccines: W.H.O. Technical Report Series No. 263, 1963.
5. Schwarz, A.J.F.: Annales Paediatrici, **202:** 241-253, 1964.
6. Morley, D. C. et al.: Bull. W.H.O., **30:** 733-739, 1964.
7. Andelman, S. L. et al.: Scientific exhibit at annual meeting of The American Academy of Pediatrics, 1964.
8. Krugman, S. et al.: J. Pediatrics, **66:** 471-488, 1965.

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DECASPRAY® brings cooling relief to burning, itching, and inflamed skin at a touch. Each can of DECASPRAY—held upright, upside down, or at any angle—can be used 133 times (1-second sprays) to control a variety of allergic and inflammatory skin disorders, and help prevent infection... to dry moist, oozing lesions.

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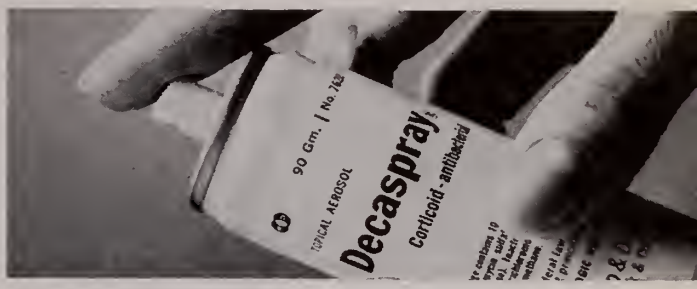

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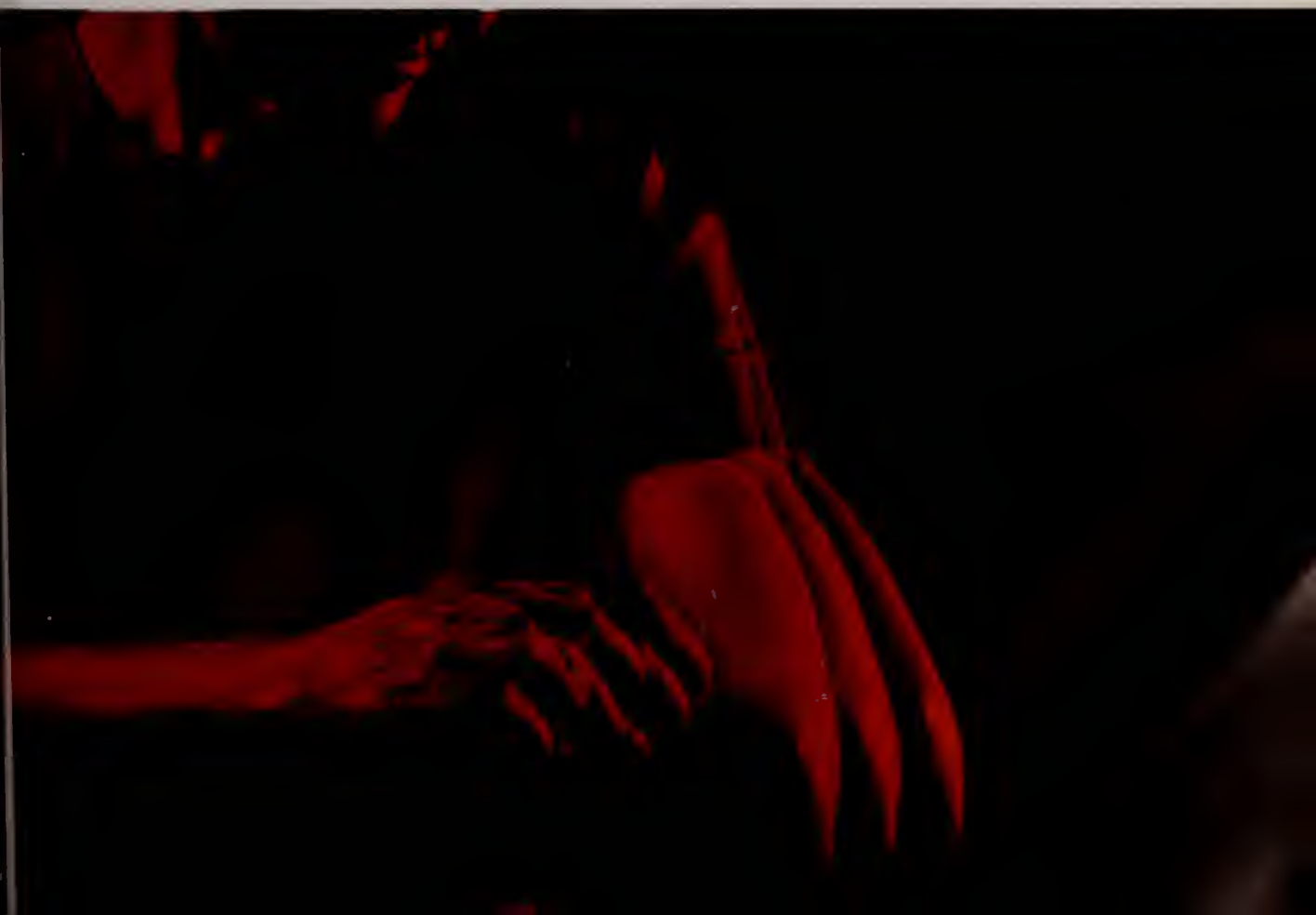

Deaths

Askue, Chester Merritt, Port Charlotte; born in 1896; Eclectic Medical College, Cincinnati, Ohio, 1923; came to Florida in 1962 from Natrona Heights, Pa., locating in Port Charlotte where he engaged in the practice of roentgenology; was a veteran of World War I; held membership in the American Medical Association, Society of Nuclear Medicine, American College of Radiology and Radiological Society of North America; died July 22, aged 69.

Austin, Edgar, Plant City; born in Golconda, Ill., Aug. 13, 1879; University of Louisville School of Medicine, Louisville, Ky., 1909; interned at Louisville City Hospital and engaged in other postgraduate training at Harvard Medical School, Boston; was a veteran of World War I, serving as a lieutenant in the Army Medical Corps; entered the general practice of medicine in Benton, Ill., where he continued to practice until 1926, locating in Plant City in 1927; had confined his practice to internal medicine since 1953 and was for many years associated with the late Dr. T. C. Maguire; was the county health physician for east Hillsborough County and was Plant City physician; was a founder of the South Florida Baptist Hospital and a charter member of its board of directors; held membership in the American Medical Association; died August 1, aged 85.

Barranco, Anthony Joseph, Lake Wales; born in Birmingham, Ala., Oct. 7, 1908; Tulane University School of Medicine, New Orleans, La., 1933; served an internship at Hillman Hospital and a residency at Polk County Hospital, Bartow; entered the general practice of medicine in Lake Wales in 1937; served during World War II as a flight surgeon in the Air Force with duty primarily in Guam and the South Pacific; held membership in the American Medical Association and the Southern Medical Association; died August 21, aged 56.

Cram, George Eversleigh, Bay Pines; born in Norwalk, Conn., Oct. 14, 1875; Columbia University College of Physicians and Surgeons, New York City, 1901; engaged in the general practice of medicine and surgery in Mexico and later in Norwalk before locating in West Palm Beach where he practiced from 1931 to 1956 residing thereafter in St. Petersburg; was a veteran of World War I, serving as a lieutenant in the Navy; held membership in the American Medical Association; died August 31, aged 89.

Graves, Leander Johnson, Tallahassee; born in Franklin County, Alabama, March 13, 1882; Birmingham Medical College, Birmingham, Ala., 1910; entered the general practice of medicine in Leighton, Ala., in 1912; entered the United States Army in 1916, serving in World War I; after the war, engaged in general practice in Russellville, Ala. until 1929; entered the Public Health field and from 1931 to 1949 was Director of the Leon County Health Department, Tallahassee; following retirement from this post, served for five years as Director of the Florida Crippled Children's Commission; was president of the Florida Public Health Association in 1941; died April 11, aged 83.

Hayes, Candler Kilgo, Homestead; born in Prescott, Ark., in 1911; University of Arkansas School of Medicine, 1938; interned at St. Luke's Hospital, Jacksonville, and the University of Florida Infirmary, Gainesville, and was a staff member of Florida State Hospital, Chattahoochee, for one year; served as a major in the Air Force from 1942 to 1946; after World War II, returned to Little Rock where he practiced with his older brothers for a short time before returning to Florida; practiced briefly in Starke and Madison before continuing the practice of medicine and surgery in Homestead since 1957; held membership in the American Medical Association, Southern Medical Association, International College of Surgeons and American Board of Abdominal Surgeons; died August 11, of complications following surgery two months previously, aged 51.

Kleinman, Bernard Samuel, Miami Beach; born in 1892; University of Illinois College of Medicine, Chicago, 1926; taught at the Chicago Medical School from 1932 to 1942; located in Miami Beach in 1942 where he had practiced internal medicine since that time; was a member of the American Medical Association and Southern Medical Association; died July 27 after six months hospitalization following a cerebral accident, aged 72.

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*Need in human nutrition not established. **As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

Side Effects and Contraindications: DACTILASE is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

Administration and Dosage: One tablet with, or immediately following each meal. Tablets should be swallowed whole.

Supplied: Bottles of 60 and 250.

LAKESIDE LABORATORIES, INC.
Milwaukee, Wisconsin 53201

a rapid lift from the hell of depression

Doré Illustration
from
Dante's Inferno

often relieves mental pain in 2-5 days

NORPRAMIN®
(desipramine hydrochloride)

Norpramin is a rapid-acting specific drug for the treatment of depression. Depressive signs and symptoms—sometimes described as "mental pain"—typically begin to improve in 2-5 days. Patients are more hopeful, less empty and less weighed down by their troubles. Norpramin has only slight sedative qualities, nevertheless anxiety *secondary to depression* is frequently relieved as depression is lifted. If anxiety or tension persists it can be controlled by adding a tranquilizer or by reducing dosage. Norpramin is not a MAO inhibitor. Side effects are usually mild.

DOSAGE AND ADMINISTRATION

Optimal results are obtained at a dosage of about 150 mg./day—two 25 mg. tablets t.i.d. After achieving optimal results, a maintenance dose (50-100 mg./day) should be sought.

LAKESIDE LABORATORIES, INC. Milwaukee, Wisconsin 53201

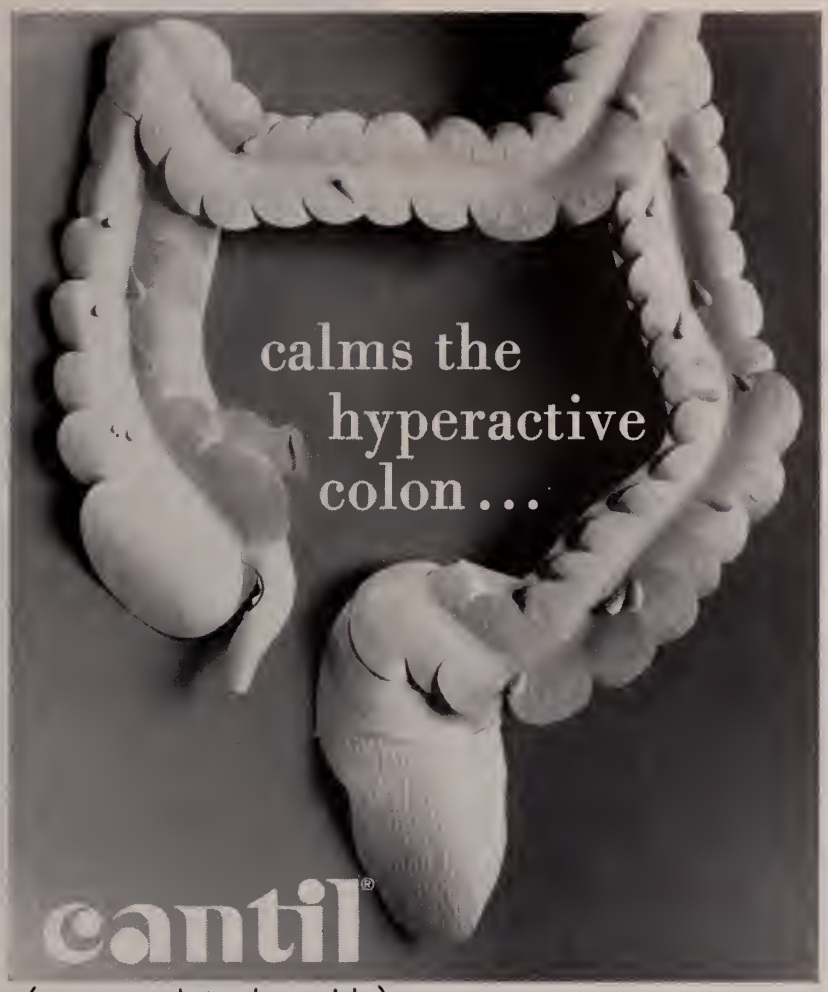
IN BRIEF:

Indications: In depression of any kind—neurotic and psychotic depressive reactions; manic-depressive or involutional psychotic reactions.

Contraindications and Precautions: Glaucoma, urethral or ureteral spasm, recent myocardial infarction, severe coronary heart disease and epilepsy. Should not be given within two weeks of treatment with a monoamine oxidase inhibitor. Safety in human pregnancy has not been established.

Adverse Effects: Side effects, usually mild, may include: dry mouth, constipation, dizziness, palpitation, delayed urination, "bad taste," sensory illusion, tinnitus, agitation and stimulation, sweating, drowsiness, headache, orthostatic hypotension, flushing, nausea, cramps, weakness, blurred vision and mydriasis, rash, allergy, transient eosinophilia, granulopenia, altered liver function, ataxia and extrapyramidal signs.

Supplied: Norpramin (desipramine hydrochloride) tablets of 25 mg., in bottles of 50, 500 and 1000.



(mepenzolate bromide)

helps restore normal motility and tone

Cantil (mepenzolate bromide) works in the colon. In irritable colon, spastic colon, ulcerative colitis and other functional and organic colonic disorders, it acts to:

- control diarrhea/constipation
- relieve spasm, cramping, bloating
- make patients more comfortable

with little effect on stomach, bladder or other viscera.

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects. Blurring of vision or dryness of the mouth were occasionally seen and were usually managed with a reduction in dosage. Urinary retention, noted in two cases was eliminated in one by reducing dosage."[1]

IN BRIEF:

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

Supplied: CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250.

CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

LAKESIDE LABORATORIES, INC.
Milwaukee, Wisconsin 53201

Monitor physiologic conditions of interest with Sanborn "*Standard Unit*" systems

Probably no two hospitals exist which have identical surgical procedures, identical physiologic information display requirements, or identical budgets for OR monitoring equipment.

Yet costly, custom-built monitoring systems are *not* necessary in most cases to do the job the surgical team wants done: building from an extremely wide range of available, standard, compatible instruments, Sanborn can and does provide complete, dependably trouble-free monitoring systems to meet the specific and different needs of hospitals and medical centers world-wide.

Systems can range from a simple combination of a few units for visual display only of the ECG, one temperature and two pressure measurements, for example — to very comprehensive installations which display and record 20 or more phenomena simultaneously, and provide complete intercommunications facilities and specialized measurement and analysis capabilities as well.

Frequently-used Sanborn units for *visual display* include oscilloscopes for waveform presentation of rapidly-changing events, illuminated numerical readouts which display up to four phenomena in three-digit values, and large scale meters for slowly changing events.

For *graphic recording,* heated stylus and optical oscillographs provide high resolution, permanent analog chart recordings of conditions. For *permanent storage* of data, with the ability to recreate the conditions again and again and over an expanded or compressed time interval, Sanborn magnetic tape recording systems provide extreme fidelity and precision at lower cost than many systems of comparable performance.

From such standard Sanborn units or "building blocks", the hospital has complete *freedom of choice* in system capabilities — coupled with the *economies* of regularly-manufactured products available from a single, experienced source. Tell us what you wish to monitor and any special conditions of use, and we will outline without obligation our system recommendation and cost estimate, to meet your monitoring requirements. Sanborn Division, Hewlett-Packard Company, Waltham, Mass. 02154.

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In addition to OR monitoring systems, Sanborn's new "780" modular units give complete flexibility and "add on" capabilities for bedside and central station monitoring in the ICU, recovery room and emergency room. New "780" brochure available on request.

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when even southern sun fails to warm cold hands and feet

provide rapid, sustained vasodilation for warmth and relief of pain, dizziness and faintness in patients with impaired peripheral circulation

GERILIQUID warms cold hands and feet through the thermogenic action of glycine and through sustained vasodilation by glycine and niacin. In addition, in patients with impaired peripheral circulation, GERILIQUID increases the ability to walk farther with less pain. Patients particularly like the palatable, sherry wine base.

IN BRIEF: Composition: Each 5 ml. contains: niacin 75 mg. and aminoacetic acid (glycine) 750 mg. in a palatable sherry wine base; alcohol 5%.

Side Effects: Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is concomitant administration of a coronary vasodilator.

Administration and Dosage: One or two teaspoonfuls 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation.

Supplied: Bottles of 8 oz. and 16 oz.

LAKESIDE LABORATORIES, INC. Milwaukee, Wisconsin 53201

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not all your patients
are overweight

but
for those who are...

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Most overweight patients could benefit from the appetite control provided by the prolonged anorexigenic-tranquilizing action of BAMADEX SEQUELS: anorexigenic action through the central stimulant effect of the amphetamine; tranquilizing action with only mild sedation through meprobamate; prolonged action through sustained release of active ingredients.

Contraindications: Hyperexcitable and prepsychotic states; patients hypersensitive to meprobamate.

Side Effects: Occasional allergic skin reactions may occur with meprobamate, accompanied by fever, nonthrombocytopenic purpura, angioneurotic edema, hypotension, or bronchial spasm. Drowsiness with or without ataxia and/or alteration in visual accommodation may occur. Effects of alcoholic beverages may be increased by meprobamate. Use with caution in patients with coronary or cardiovascular disease or severe hypertension. Prolonged use may result in dependence. Reactions can occur if drug is not withdrawn gradually.

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the price of "success"

190 / 102

Hypertension has been called the price of success... and in some life-situations, the cost of failure. In either event, Metatensin lowers blood pressure, cushions the patient against stress and retards the progress of disease. Metatensin is effective and economical. It is well-tolerated over long periods.

THERAPY
YOU CAN STAY
WITH

METATENSIN®

EACH SCORED TABLET CONTAINS:
Metahydrin® (trichlormethiazide) 2 mg. or 4 mg. Reserpine 0.1 mg.

In Brief: Patients with hepatic cirrhosis or diarrheal syndromes, or under therapy with digitalis, ACTH, or potassium-losing steroids, should be observed for signs of hypokalemia. With thiazides, electrolyte depletion, diabetes, gout, granulopenia, nausea, pancreatitis, cholestatic jaundice, flushing, mild muscle cramps, constipation, photosensitivity, acute myopia, perimacular edema, paresthesias, neonatal bone marrow depression in infants of mothers who received thiazides during pregnancy, skin rash or purpura with or without thrombocytopenia, may occur. With reserpine, untoward effects may include depression, peptic ulcer and bronchial asthma. Withdraw medication at least 7 days prior to electroshock therapy, 2 weeks prior to elective surgery. Contraindications are complete renal shutdown, rising azotemia or development of hyperkalemia or acidosis in severe renal disease.
Supplied: Metatensin tablets, 2 mg., 4 mg. — bottles of 100 and 1000.

LAKESIDE LABORATORIES, INC. Milwaukee, Wisconsin 53201

The Pain Is Gone

Despite introduction of synthetic substitutes, efficacy of 'Empirin' Compound with Codeine remains unchallenged.

'Empirin'® Compound with Codeine Phosphate gr. 1/2 No. 3

Each tablet contains: Codeine Phosphate gr. ½ (Warning—May be habit forming), Phenacetin gr. 2½, Aspirin gr. 3½, Caffeine gr. ½.

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BURROUGHS WELLCOME & CO. (U.S.A.) INC., TUCKAHOE, N.Y.

approximating the diuretic efficacy of meralluride

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(trichlormethiazide)

To determine the relative efficacy of thiazide diuretics in congestive heart failure, Metahydrin (trichlormethiazide) and three other thiazides were measured against Mercuhydrin® (meralluride injection)—the standard diuretic. "The results leave little doubt that the diuretic efficacy, that is, the 'ceiling effect' in these terms, is not the same for different thiazides."* The assays ranged from about 40% of the effectiveness of Mercuhydrin through 67%, 77% to 90% for Metahydrin. The latter two values were thought to be significantly different from the lowest value and to be therapeutically important.

*Gold, H., *et al*: Closed Panel Conference: Present Status of the Management of Congestive Failure and Advances in Diuretic Therapy, Journal of New Drugs, 1:177, July-August, 1961.

LAKESIDE LABORATORIES, INC.
Milwaukee, Wisconsin 53201

IN BRIEF: ADMINISTRATION AND DOSAGE: One 2 mg. or 4 mg. tablet once or twice daily. In acute, severe decompensation, Mercuhydrin® (meralluride injection) may be necessary initially.

PRECAUTIONS: As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

SIDE EFFECTS: Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have been occasionally noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by administration of thiazides.

CONTRAINDICATIONS: Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

HOW SUPPLIED: Bottles of 100 and 1000 tablets.

On Stelazine® brand of trifluoperazine
she's calm and alert

When a tranquilizer is needed, 'Stelazine' can regulate the level of anxiety so that the patient is unlikely to overreact to stress but is not tranquilized into psychic inertia. Patients on 'Stelazine' often experience a sense of mental alertness and, because they feel so much better, are more interested in their normal activities.

Contraindicated in comatose or greatly depressed states due to CNS depressants and in cases of existing blood dyscrasias, bone marrow depression and pre-existing liver damage. *Principal side effects,* usually dose-related, may include mild skin reaction, dry mouth, insomnia, fatigue, drowsiness, dizziness and neuromuscular (extrapyramidal) reactions. Muscular weakness, anorexia, rash, lactation and blurred vision may also be observed. Blood dyscrasias and jaundice have been extremely rare. Use with caution in patients with impaired cardiovascular systems.

Before prescribing, see SK&F product Prescribing Information.

Photograph professionally posed.

SK&F

Smith Kline & French Laboratories

WHEN MOTHER'S IRON ISN'T UP TO MOTHERHOOD

IN BRIEF: ACTIONS AND USES: A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency anemia may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion *as a source of iron;* infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

COMPOSITION: Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. of elemental iron in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

ADMINISTRATION AND DOSAGE: Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

SIDE EFFECTS: Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylactoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache, and fever have occasionally been reported. Initial test doses of 0.5 cc. are advisable.

PRECAUTIONS: If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

CONTRAINDICATIONS: Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only, it is contraindicated in other anemias.

CARCINOGENICITY POTENTIAL: Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

SUPPLIED: 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

in iron deficiency anemia for rapid and predictable replacement of iron reserves

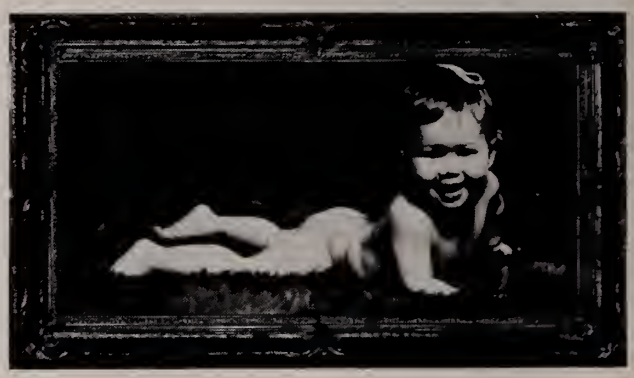
imferon®

(iron dextran injection)

LAKESIDE LABORATORIES, INC. • Milwaukee, Wisconsin 53201

Turn a bundle of colic

into a bundle of joy



COLIC, often in part a reflection of family tension, adds sleepless nights to patients' and parents' distraught days. Pediatric Piptal with Phenobarbital slows down spasm, diminishes pain and crying, improves feeding patterns . . . permits sleep and rest . . . for patient and family.

Pleasant tasting Pediatric Piptal with Phenobarbital is miscible in milk, formulas and fruit juices, and may also be administered by dropper directly on the infant's tongue. Dosage is 0.5 cc. 15 minutes before feeding; in severe cases, 1.0 cc. four times daily. High doses may occasionally cause constipation with tenesmus and, rarely, flushing without fever. Contraindicated in bowel obstruction or sensitivity to phenobarbital or anticholinergics. Available in 30 cc. dropper bottles, droppers calibrated to deliver 0.5 cc.

PEDIATRIC PIPTAL® WITH PHENOBARBITAL

each cc. contains: 6 mg. phenobarbital (warning: may be habit forming); 4 mg. Piptal® (pipenzolate bromide), and 20% alcohol in a pleasant-tasting solution.

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Milwaukee, Wisconsin 53201

duodenal ulcer

Prompt relief of pain and spasm in functional g.i. distress...

gastric ulcer

PIPTAL® (pipenzolate bromide) efficiently suppresses acid secretion and motility ... relieves pain and spasm of peptic ulcer. Despite its potent gastrointestinal effects, "its clinically effective therapeutic dose is well below that required to produce side reactions."[1] Because urinary retention is rarely a problem, PIPTAL (pipenzolate bromide) is "a highly desirable drug in the treatment of peptic ulcer in older patients ..."[2] Tolerance to PIPTAL (pipenzolate bromide) has not been demonstrated, and the drug may be administered over prolonged periods without loss of efficacy. *PIPTAL-PHB is specifically designed for the tense ulcer patient who will benefit from the sedative effect of phenobarbital.*

1—Pomeranze, J., and Gadek, R.J.: Am. Pract. & Digest Treat. *8*:73-77 (Jan.) 1957

2—Asher, L.M.: Am. J. Digestive Diseases *4*:272 (Apr.) 1959

PIPTAL®
(pipenzolate bromide)

PIPTAL®-PHB
(phenobarbital, 16 mg., pipenzolate bromide, 5 mg.)

IN BRIEF: PIPTAL—Each tablet contains 5 mg. pipenzolate bromide, PIPTAL-PHB—Each tablet (or 5 cc. of elixir) contains phenobarbital (warning: may be habit forming) 16.0 mg., Piptal (pipenzolate bromide) 5 mg. The elixir contains alcohol 20%.

Side Effects: Dry mouth, blurring of vision or drowsiness may occur.

Contraindications: Withhold in glaucoma, bladder or g.i. obstruction, cardiac arrhythmias and in sensitivity to anticholinergics or phenobarbital (Piptal-PHB). Caution should be observed in patients with prostatic hypertrophy.

Administration and Dosage: PIPTAL or PIPTAL-PHB Tablets: One tablet three times a day before meals and one or two tablets at bedtime. (PIPTAL-PHB Elixir: One teaspoonful three or four times daily for adults and children over six years of age.)

Supplied: PIPTAL (pipenzolate bromide) 5.0 mg. Tablets—bottles of 100. PIPTAL-PHB Tablets—bottles of 100. PIPTAL-PHB Elixir—bottles of 8 fluid ounces.

LAKESIDE LABORATORIES, INC. Milwaukee, Wisconsin 53201

First of all for mild hypertension

Serpasil® (reserpine)

Start with Serpasil (reserpine)
- produces a gradual, sustained lowering of blood pressure, especially in the neurogenic type of hypertension.
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- slows the rapid heart and maintains the slowed rate.

Build on Serpasil (reserpine)
- serves as baseline therapy for certain other more potent antihypertensive agents.
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- brings about increased therapeutic response when combined with certain other antihypertensives.

Serpasil®
(reserpine CIBA)

INDICATIONS: Mild to moderate hypertension. CAUTIONS: Severe mental depression has appeared in a small percentage of patients, primarily in a dosage above 1 mg daily. Usually the patient had a pre-existing, incipient, endogenous depression which was unmasked or accentuated by reserpine. When the drug is discontinued, depression usually disappears, but hospitalization and shock therapy are sometimes required. Daily dosage above 0.25 mg is contraindicated in patients with a history of mental depression or peptic ulcer; use lower doses with caution. Not recommended in aortic insufficiency. Withdraw reserpine 2 weeks before surgery, if possible. For emergency surgical procedures, give vagal blocking agents parenterally to reverse hypotension and/or bradycardia. Use cautiously with digitalis, quinidine, or guanethidine. When patients on reserpine receive electroshock therapy, use lower milliamperage and a shorter duration of stimulus initially. Shock therapy within 7 days after giving the drug is hazardous. SIDE EFFECTS: Occasional: lassitude, drowsiness, nasal congestion, looseness of stools, increased frequency of defecation. Rare: anorexia, headache, bizarre dreams, nausea, dizziness. Nasal congestion and increased tracheobronchial secretions may occur in newborn babies of mothers treated with reserpine. AVERAGE DOSAGE: *Initial*—Two 0.25-mg tablets p.c. daily. *Maintenance*—Reduce daily dosage to 0.25 mg or less p.c. SUPPLIED: *Tablets*, 0.25 mg (white, scored) and 0.1 mg (white).
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Summit, New Jersey

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Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 40 years of service.

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Contact: Medical Director, Highland Hospital, Asheville, N.C. 28801

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Schedule of Meetings

ORGANIZATION	PRESIDENT	SECRETARY	ANNUAL MEETING
Florida Medical Association	H. Phillip Hampton, Tampa	Floyd K. Hurt, Jacksonville	Hollywood, May 11-15, 19
Florida Specialty Societies			(Specialty Group meetings are scheduled at the time of the annual meeting of the Association)
Allergy Society	Walter L. Schafer, St. Petersburg	George Gittelson, Miami	
Anesthesiologists, Soc. of	J. Gerard Converse, Winter Haven	Richard C. Hartsfield, Daytona Bch.	
Chest Phys., Am. Coll. Fla. Chap.	Nelson H. Kraeft, Tallahassee	Harold C. Spear, Miami	
Dermatology, Soc. of	John H. Hicks, Miami	William W. Bruce, Winter Park	
General Practice, Academy	Walter W. Sackett Jr., Miami	William P. Clarke, Jacksonville	
Health Officers, Soc. of	T. Paul Haney, Titusville	Elbert C. Prather, Jacksonville	
Internal Medicine	Kenneth G. Gould, Tampa	Scheffel H. Wright, Miami	
Neurosurgical Society	David H. Reynolds, Miami	Jack W. Barrett, Miami	
Obst. & Gynec. Society	Arthur J. Wallace Jr., Tampa	Davis H. Vaughn, Clearwater	
Ophth. & Otol. Society	Thomas M. Irwin, Jacksonville	Bernard M. Barrett, Pensacola	
Orthopedic Society	George I. Raybin, Jacksonville	Leon H. Mims Jr., Coral Gables	
Pathologists, Society of	Sanford A. Mullen, Jacksonville	Laudie E. McHenry Jr., Melbourne	
Pediatric Society	Robert J. Grayson, Miami Beach	Oliver F. Deen Jr., Tampa	
Phys. Med. & Rehab., Fla. Soc.	Arthur J. Pasach, Tampa	Geo. A. Cunningham III, Delray B.	
Plastic & Reconstr. Surg.	William M. Douglas, Orlando	J. M. Hamilton, St. Petersburg	
Proctologic Society	John J. Cheleden, Daytona Beach	John T. McCormick, Jacksonville	
Psychiatric Society	Walter H. Wellborn Jr., Tarpon Sp.	William C. Ruffin Jr., Gainesville	
Radiological Society	David Kirsh, Miami	John C. Jowett, Orlando	
Surgeons, Am. Coll., Fla. Chap.	Robert F. Dickey, Miami	Harry W. Reinstine Jr., J'ville	
Surgeons, Int. Coll., Fla. Chap.	Leo H. Wilson Jr., Sarasota	Fred H. Albee Jr., Daytona Bch.	
Surgeons, General, Fla. Assn.	Emmet F. Ferguson Jr., J'ville	Jesse W. Castleberry, Orlando	
Urological Society	Robert J. Brown, Jacksonville	Carey N. Barry, Ft. Myers	
FLORIDA			
American Cancer Society, Div.	Sam W. Denham, Jacksonville	Mrs. Martin Gould, Ft. Pierce	Sarasota, October, 1966
Arthritis Foundation, Chap.	Ernest R. Currie, Daytona Beach	Mitchell Kessler, Sarasota	
Basic Science Examining Board	Paul A. Vestal, Winter Park	Theodore A. Ashford, Ph.D., 1832 Bearss Ave., Tampa	Coral Gables, June 4, 1966
Blood Banks, Association	Leo E. Reilly, St. Petersburg	Catherine Macaluso, St. Petersburg	Jacksonville 1966
Blue Shield of Florida, Inc.	W. Dean Steward, Orlando	John T. Stage, Jacksonville	Hollywood, May 11-15, '66
Crippled Children & Adults, Soc. of	Bruce Thomason, Gainesville	Mrs. Page Hufty, Palm Beach	Melbourne, May 6-8, '66
Diabetes Association	Seymour L. Alterman, Miami Bch.	Robert T. Rengarts, Sebring	Miami, Sept. 29-30, '66
Heart Association	Carl M. Voyles, St. Petersburg	Mrs. Michael Kwasin, Pensacola	Miami, May 6-8, '66
Medical Examining Board	J. Champneys Taylor, J'ville	Leo Grossman, M.D., 2900 N. Bay Rd., Miami 40	Miami Beach, July 1966
Mental Health, Association for	Loper B. Lowry, Tampa	Mrs. Paul E. Rice, Daytona Bch.	Sarasota, April 1966
National Foundation	Basil O'Connor, New York City	Ed Foreman, Orlando	New York City, Apr. 6, '66
Prevention of Blindness, Soc. for	Mrs. S. R. Kirby, St. Petersburg	Mrs. Richard Nosti, Tampa	November 1966
Public Health Association	William R. Stinger, Miami	Miles T. Dean, Jacksonville	Hollywood, Sept. 28-Oct. 1,
Retarded Children, Association for	Mary E. Ward, Avon Park	Jane Riedel, Cocoa	Lakeland, May 6-8, '66
Thoracic Society	David M. Travis, Gainesville	Nelson H. Kraeft, Tallahassee	Jacksonville, Apr. 1-2, '66
Tuberculosis & Res. Dis. Assn.	Tom Coldewey, Port St. Joe	J. C. Inman, Orlando	Jacksonville, Apr. 1-2, '66
United Cerebral Palsy of Florida	J. Thomas Gurney Jr., Orlando	Harry Botwick, Miami	October 1966
Woman's Auxiliary	Mrs. H. Quillian Jones, Ft. Myers	Mrs. R. F. Boudreau, Ft. Myers	Hollywood, May 11-15, '66
American Medical Association	James Z. Appel, Lancaster, Pa.	F. J. L. Blasingame, Chicago	Chicago, June 26-30, '66
A.M.A. Clinical Session			Las Vegas, Nov. 27-30, '66

National Meetings in Florida

American College of Surgeons (sectional meeting), Americana Hotel, Bal Harbour, Jan. 13-15, 1966. Samuel P. Harbison, M.D., Secy., 55 E. Erie St., Chicago, Illinois 60611.

American College of Cardiology (postgraduate course), Mt. Sinai Hospital, Miami Beach, Jan. 20-22, 1966. Executive Director, 9650 Rockville Pike, Washington, D. C. 20014.

International Anesthesia Research Society (40th Congress), Americana Hotel, Bal Harbour, Feb. 27-March 4, 1966. A. William Friend, M.D., Ex. Secy., 227 Wade Park Manor, Cleveland, Ohio 44106

American Surgical Association, Boca Raton Hotel, Boca Raton, March 23-25, 1966. Harris B. Shumacker Jr., Ex. Secy., 1100 W. Michigan St., Indianapolis, Ind.

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Alachua	Richard P. Schmidt, Gainesville	Taylor H. Kirby Jr., Gainesville	2nd Tues.	21	128
**Branford, Gilchrist, Union*					
Bay	John L. Fishel, Panama City	Malcolm M. Traxler, Panama City	1st Tues.	0	36
Brevard	Benjamin F. Knotts Jr., Cocoa Beach	William F. Addington, Cocoa Beach	1st Tues.	4	131
Broward	Frederick W. Fisher, Ft. Lauderdale	David R. Rogers, Ft. Lauderdale	4th Tues.	38	373
Charlotte	Carl N. Reilly, Punta Gorda	Charles M. Wilson, Port Charlotte	2nd Tues.	2	9
Clay	John M. Malone, Green Cove Springs	Aubrey Y. Covington, Green Cove Springs		0	9
Collier	Louis S. Moore, Naples	Ethel H. Trystad, Naples	3rd Wed.	0	18
Columbia	Barney E. McRae Jr., Lake City	John T. Wilson, Lake City	3rd Wed.	1	13
**Baker*					
Dade	Richard M. Fleming, Miami	Chester Cassel, Miami	1st Tues.	158	1,305
DeSoto-Hardee-Glades	Barbara C. Carlton, Wauchula	Grant P. Carmichael, Wauchula	1st Tues.	0	16
Duval	G. Dekle Taylor, Jacksonville	John H. Terry, Jacksonville	1st Tues.	44	388
Escambia	Earl G. Wolf, Pensacola	Donald McMahon Jr., Pensacola	2nd Tues.	2	130
Franklin-Gulf	J. Wayne Hendrix, Port St. Joe	Harold B. Canning, Wewahitchka	Last Wed.	0	5
Gadsden-Liberty	Taylor W. Griffin, Quincy	George H. Massey, Quincy	Quarterly	0	14
Highlands	Howard V. Weems, Sebring	Augustus H. Foster Jr., Sebring	3rd Mon.	2	23
Hillsborough	W. Mahon Myers, Tampa	Frank A. Massari, Tampa	1st Tues.	6	319
Indian River	James C. Robertson, Vero Beach	E. B. Hardee Jr., Vero Beach	2nd Tues.	0	24
Jackson-Calhoun	James T. Cook, Marianna	Francis M. Watson, Marianna	Quarterly	0	18
Lake	Argin A. Boggus Jr., Tavares	Frederick C. Hester III, Eustis	1st Mon.	2	42
Lee-Hendry	Frank M. Bryan, Ft. Myers	Orville E. Blank, Ft. Myers	3rd Mon.	14	55
Leon-Wakulla-Jefferson	James K. Conn, Tallahassee	Stuart C. Smith, Tallahassee	1st Mon.	8	78
Madison	Julian M. DuRant, Madison	A. Franklin Harrison, Madison	1st Tues.	1	6
Manatee	C. Sumner Quimby, Bradenton	Albert C. Knowles, Palmetto	2nd Tues.	4	54
Marion	Robert L. Gibson, Ocala	West Bitzer, Ocala	3rd Tues.	7	42
**Levy*					
Monroe	William R. Ploss, Key West	Hanns C. Korus, Key West	1st Thurs.	3	21
Nassau	Cecil B. Brewton, Fernandina Beach	John B. Britton, Fernandina Beach	2nd Thurs.	4	8
Okaloosa	Eugene R. Celano, Fort Walton Beach	Henry I. Langston, Fort Walton Beach	1st Wed.	0	22
Orange	Truett H. Frazier, Orlando	Duane C. Deen, Orlando	3rd Wed.	44	312
**Osceola*					
Palm Beach	David W. Martin, West Palm Beach	Bernard Kimmel, West Palm Beach	4th Mon.	27	261
Pasco-Hernando-Citrus	Karl T. Humes, Bushnell	W. Wardlaw Jones, Dade City	2nd Thurs.	3	25
**Sumter*					
Pinellas	William J. Dean, St. Petersburg	William H. Keeler III, St. Petersburg	1st Mon.	70	372
Polk	Albert G. King Jr., Lakeland	Shelton T. Bass, Lakeland	2nd Wed.	20	161
Putnam	James A. Long Jr., Palatka	James R. Sayers, Palatka	2nd Tues.	1	14
St. Johns	William W. O'Connell, St. Augustine	Kenneth J. Farrow, St. Augustine	3rd Tues.	0	20
St. Lucie-Okeechobee-Martin	Russell L. Counts, Fort Pierce	George Theodorou, Fort Pierce	3rd Thurs.	2	46
Santa Rosa	Claude J. Barnes, Milton	William N. Watson, Milton		4	12
Sarasota	T. Vernon Finch, Sarasota	Fred J. Swartzendruber, Sarasota	2nd Tues.	18	110
Seminole	Robert M. Rosemond, Sanford	William C. Rape, Sanford	2nd Tues.	1	24
Suwannee-Hamilton-Lafayette	Hugo F. Sotolongo, Live Oak	Wilton R. Kane, Live Oak	1st Sat.	0	6
Taylor	James A. Rawls, Perry	John A. Dyal Jr., Perry	Last Fri.	0	7
**Dixie*					
Volusia	Herbert A. King, Daytona Beach	Charles L. Rickerd, Daytona Beach	2nd Tues.	6	120
**Flagler*					
Walton	McKinley Cheshire Jr., DeFuniak Springs	Howard F. Currie, DeFuniak Springs	3rd Tues.	0	9
Washington-Holmes	John T. Grace, Bonifay	Jimmy F. Henry, Chipley	Quarterly	0	5
			Total	517	4,791
			Grand Total	5,308	
			Direct	1	

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